417 S HILL STREET
HISTORIC REHABILITATION
417 SOUTH HILL STREET
LOS ANGELES, CALIFORNIA

OWNER: 417 S HILL ST LA LLC
680 DAVIS STREET
SAN FRANCISCO, CALIFORNIA 94111
TEL: (909) 229-5073

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
DISABLED ACCESS SECTION

This set of plans and specifications has been reviewed and is approved for compliance with state and local laws and ordinances related to accessibility to public accommodations and housing.

The stamping of this set of plans and specifications shall not be held to permit or to be an approval of the violation of any provisions of federal, state, and local laws and ordinances related to accessibility to public accommodations and housing.

1 of 7

By: EDDIE GARIN Total of Sheets

Date: 03/31/2023

22016-10000-19644

SCOPE OF WORK

PROJECT DESCRIPTION :

THIS IS A REHABILITATION FOR THE GROUND FLOOR OF AN EXISTING HISTORICAL BUILDING. IT INCLUDES INTERIOR REHABILITATION OF EXISTING MARBLE FLOORS, TERRA COTTA FINISHES, PLASTER COFFER CEILINGS, GLASS WORK, AND PARTIAL EXTERIOR CLEANING OF EXISTING GRANITE TILES AND CORBELS, PLASTER WORK, GLASS MOSAIC, LIGHT FIXTURES; NEW STOREFRONT IN EXISTING OPENNINGS.

DEFERRED SUBMITTALS :

- FIRE LIFE SAFETY SYSTEM, INCLUDING FIRE SPRINKLER SYSTEM, FIRE ALARM SYSTEM, STROBES AND HORNS AS REQUIRED PER CODE AND LOCAL ORDINANCE TO COMPLY WITH NFPA 13 AND NFPA 72

SUBMITTAL DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER OF RECORD WHO SHALL REVIEW THEM FOR GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING AND RETURN THEM TO THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THE DOCUMENTS TO THE BUILDING DEPARTMENT (OR OTHER REQUIRED REGULATING AGENCY) FOR REVIEW AND APPROVAL AND OBTAINING THE NECESSARY PERMITS. NO CONSTRUCTION FOR DEFERRED SUBMITTAL ITEMS SHALL COMMENCE UNTIL ITEM IS APPROVED AND PERMITTED BY THE BUILDING DEPARTMENT.

HISTORICAL PRESERVATION :

G.C. TO FOLLOW THE SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES WITH GUIDELINES FOR PRESERVING, REHABILITATING, RESTORING, AND RECONSTRUCTING HISTORIC BUILDINGS, TECHNICAL DOCUMENTS AND SPECIFICATIONS FROM THE FEDERAL GENERAL SERVICES ADMINISTRATION. SPECIFICALLY, SEE SEE A-0.2A THROUGH A-0.2E

DESIGN-BUILD

FOR DESIGN-BUILD PORTIONS OF WORK REFER TO GENERAL NOTE 24

SITE INFORMATION

ASSESSORS PARCEL NO. :

5149-027-BRK

LEGAL DESCRIPTION :

TRACT: TR 53831-C
MAP REFERENCE: MB 1324-69/78
LOT: LT1
MAP SHEET: 129A211
130-5A211

CODE SUMMARY

CODE REFERENCES

APPLICABLE CODES INCLUDE, BUT NOT LIMITED TO THE FOLLOWING:

BUILDING:	LABC 2020
FIRE:	LABC 2020
ENERGY:	LABC 2020
TITLE 24:	LABC 2020 CALIFORNIA TITLE 24 DISABLED ACCESS REQUIREMENTS
GREEN:	LABC 2020

LOS ANGELES MUNICIPAL CODE

THE SECRETARY OF INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES WITH GUIDELINES FOR PRESERVING, REHABILITATING, RESTORING, AND RECONSTRUCTING HISTORIC BUILDINGS, AS REVISED BY ANNE E. GRIMMER, 2017

BUILDING DATA

OCCUPANCY TYPE:	E.T.R. OFFICE (B OCCUPANCY)
CONSTRUCTION TYPE:	E.T.R. TYPE 1A | FULLY SPRINKLERED
BUILDING GROSS AREA:	E.T.R. 626,830 SF
AREA OF REHABILITATION:	E.T.R. 26,970 SF | GROUND FLOOR ONLY
OCCUPANT LOAD:	EXISTING TO REMAIN
EGRESS REQUIREMENTS:	EXISTING TO REMAIN

ALLOWABLE AREA CALCULATIONS

UNLIMITED, EXISTING TO REMAIN, MIXED OCCUPANCY B & R2, NON SEPARATED

ALLOWABLE HEIGHT

EXISTING TO REMAIN:

BUILDING HEIGHT = E.T.R. 178'
NO. OF STORIES = E.T.R. 12

PLUMBING FIXTURE CALCULATIONS

TOILET FACILITY AND CALCULATIONS TO BE PROVIDED UNDER SEPARATE TENANT IMPROVEMENT PERMIT

CONTACTS

LANDLORD: 417 S HILL ST LA LLC
680 DAVIS STREET
SAN FRANCISCO, CALIFORNIA 94111
TEL: (909) 229-5073
CONTACT: George Hajjar

ARCHITECT: BICKEL GROUP ARCHITECTURE
3600 BIRCH ST.
SUITE 120
NEWPORT BEACH, CALIFORNIA 92660
TEL. (949) 757-0411 FAX (949) 757-0511
CONTACT: ELENA MASHIN

STRUCTURAL ENGINEER: NABIH YOUSSEF STRUCTURAL ENGINEERS
550 SOUTH HOPE STREET, SUITE 1700
LOS ANGELES, CALIFORNIA 90071
(213) 362-0707 DIRECT (213) 417-1239
CONTACT: JACOB RODRIGUEZ

HISTORIC CONSULTANT: HISTORIC RESOURCE GROUP
12S FAIR OAKS ACENUE, SUITE 200
PASADENA, CALIFORNIA 91105-3816
(626) 793-2400 X109
CONTACT: JOHN LoCASCIO

CONTRACTOR: T.B.D.

SHEET INDEX

ARCHITECTURAL

A-0.0	TITLE SHEET
A-0.1	CAL GREEN
A-0.2A	STANDARD FOR REHABILITATION
A-0.2B	STANDARD FOR REHABILITATION
A-0.2C	STANDARD FOR REHABILITATION
A-0.2D	STANDARD FOR REHABILITATION
A-0.2E	STANDARD FOR REHABILITATION
A-0.3	OVERALL SITE PLAN FOR REFERENCE ONLY
A-0.4	ENLARGED SITE PLAN @ PASEO & EGRESS PLAN
A-1.0	EXISTING FLOOR PLAN
A-2.0	PROPOSED FLOOR PLAN
A-2.1	REFLECTED CEILING PLAN
A-3.0	ELEVATION TO BE RESTORED
A-3.1	ELEVATION TO BE RESTORED
A-5.0	DOOR SCHEDULE, EXTERIOR & INTERIOR DETAILS

GENERAL NOTES

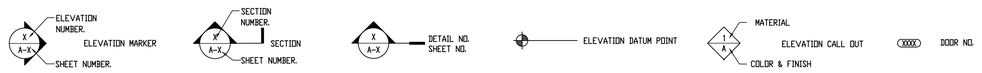
GENERAL NOTES:

1. THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION – A201 2007 EDITION OF THE AMERICAN INSTITUTE OF ARCHITECTS ARE HEREBY MADE A PART OF THESE CONTRACT DOCUMENTS TO THE SAME EXTENT AS IF BOUND HEREIN.
2. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE 2019 C.B.C. AND ALL OTHER GOVERNING AUTHORITIES HAVING JURISDICTION.
3. ALL WORK SHALL CONFORM TO THE CABO/ANSI A117.1 2009 STANDARD, AND SHALL BE ACCESSIBLE TO, AND USABLE BY, THE PHYSICALLY HANDICAPPED AS REQUIRED BY ALL APPLICABLE CODES AND CALIFORNIA TITLE 24, INCLUDING ANY SPECIAL LOCAL ORDINANCES.
4. INSTALL ALL MANUFACTURED ITEMS, MATERIALS AND EQUIPMENT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
5. CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL CONTRACT DOCUMENTS AND FIELD CONDITIONS TO CONFIRM THAT WORK IS BUILDABLE AS SHOWN BEFORE PROCEEDING WITH CONSTRUCTION. IF COORDINATION QUESTIONS OCCUR, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ARCHITECT AND/OR TENANT CONSTRUCTION COORDINATOR BEFORE PROCEEDING WITH THE WORK IN QUESTION OR RELATED WORK.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS.
7. CONTRACTOR SHALL SUBMIT CONFIRMATION OF DELIVERY DATES FOR ORDERED MATERIALS AND EQUIPMENT, AND SHALL NOTIFY THE ARCHITECT OF ANY LONG LEAD TIMES FOR ORDERED ITEMS.
8. CONTRACTOR SHALL SUBMIT FIVE REPRODUCIBLE SETS OF SHOP DRAWINGS OR MANUFACTURERS DATA SHEETS OF THE FOLLOWING ITEMS:
   - DOORS/WINDOWS
   - DOOR HARDWARE
   - ALL FINISH MATERIALS
   - SPRINKLER DRAWINGS
   - CEILING SYSTEMS
9. SHOP DRAWINGS SHOULD INCLUDE DETAILED FABRICATION AND ERECTION DRAWINGS, SETTING DRAWINGS, DIAGRAMMATIC DRAWINGS AND MATERIAL SCHEDULES, LOCATION AND ORIENTATION OF ALL ITEMS SHALL BE CLEARLY INDICATED. BEGIN FABRICATION ONLY AFTER ARCHITECT AND/OR TENANT CONSTRUCTION COORDINATOR HAS REVIEWED THE SHOP DRAWINGS AND MARKED THEM "NO EXCEPTION TAKEN" . THE ABOVE LIST DOES NOT LIMIT ADDITIONAL SUBMITTALS THAT MAY BE REQUIRED BY THE ARCHITECT, TENANT, OWNER OR THEIR CONSULTANTS. REVIEW BY THE ARCHITECT DOES NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS WHICH MAY EXIST IN THE SUBMITTED DATA.
10. ALL REQUESTS FOR SUBSTITUTIONS OF ITEMS SPECIFIED SHALL BE IN WRITING. ACCEPTANCE OF A SUBSTITUTION WILL BE AT THE DISCRETION OF THE ARCHITECT AND BUILDING MANAGEMENT WITH RECOMMENDATIONS FROM THE TENANT'S CONSTRUCTION COORDINATOR AND OTHER DESIGN CONSULTANTS TO THE JOB. ANY PROPOSED SUBSTITUTION SHOULD PROVIDE BETTER SERVICE TO THE FACILITIES, A MORE ADVANTAGEOUS DELIVERY DATE OR A LOWER PRICE TO THE OWNER, WITH OUT SACRIFICING QUALITY, APPEARANCE OR FUNCTION. IN NO CASE SHALL THE ARCHITECT BE REQUIRED TO PROVE THAT A PRODUCT PROPOSED FOR SUBSTITUTION IS OR IS NOT OF EQUAL QUALITY TO THE PRODUCT SPECIFIED.
11. ALL WORK NOTED "N.I.C." OR NOT IN CONTRACT IS TO BE ACCOMPLISHED BY A CONTRACTOR OTHER THAN THE GENERAL CONTRACTOR AND IS NOT TO BE A PART OF THE CONSTRUCTION AGREEMENT. THE GENERAL CONTRACTOR SHALL COORDINATE WITH OTHER CONTRACTORS AS REQUIRED.
12. ALL DIMENSIONS ARE TO FACE OF FINISH UNLESS OTHERWISE NOTED.
13. "ALIGN" AS USED IN THESE DOCUMENTS SHALL MEAN TO ACCURATELY LOCATE FINISH OF SURFACES IN THE SAME PLANE.
14. "TYPICAL" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS THE SAME REPRESENTATIVE OF SIMILAR CONDITIONS THROUGHOUT, UNLESS OTHERWISE NOTED. DETAILS ARE USUALLY KEYED AND NOTED "TYPICAL" ONLY ONCE.
15. COLUMN CENTER LINES ARE SHOWN FOR REFERENCE ONLY TO ESTABLISH POINT OF REFERENCE FOR DIMENSIONING. REFER TO SHELL BUILDING DRAWINGS OR FIELD VERIFY EXACT COLUMN LOCATIONS.
16. ALL VERTICAL DIMENSIONS ARE TO SLAB, UNLESS NOTED A.F.F. (ABOVE FINISH FLOOR).
17. DO NOT SCALE DRAWINGS, DIMENSIONS GOVERN. THERE IS NO IMPLIED DIRECTION FOR ONE DRAWING TO GOVERN OVER ANOTHER. IF ANY DISCREPANCIES IN DIMENSIONS ARE FOUND, NOTIFY THE ARCHITECT IMMEDIATELY FOR CLARIFICATION.
18. ALL WORK PERFORMED BY THE CONTRACTOR SHALL CONFORM TO THE EXISTING BUILDING STANDARDS. SEE NOTE 8 FOR SUBSTITUTIONS
19. CONTRACTOR SHALL PATCH ANY EXISTING WALLS AND/OR CEILINGS AS REQUIRED TO REFURBISH THE LEASE SPACE AND REPAIR ALL DAMAGES.
20. CONTRACTOR SHALL BE RESPONSIBLE FOR THE GENERAL CLEANING OF THE JOB AFTER COMPLETION OF CONSTRUCTION. CLEANING SHALL INCLUDE THE INTERIOR OF THE BUILDING, PATH OF TRAVEL TO THE JOB SITE, PARKING LOT, STAIRS, LOBBIES, CORRIDOR AND CARPET.
21. CONTRACTOR SHALL REFINISH ANY DAMAGED DOOR OR REPLACE THE DOOR IF UNABLE TO PROPERLY REFINISH.
22. CONTRACTOR TO FLOAT AND SAND SMOOTH BASE OF ALL WALLS BEFORE PLACEMENT OF VINYL BASE.
23. THE CONTRACTOR SHALL PROVIDE RECORD DOCUMENTS OF ALL WORK PERFORMED AND SHALL INDICATE ANY DEVIATIONS FROM THE DESIGN DOCUMENTS AS WELL AS THE LOCATION OF ALL WORK WHICH IS HIDDEN BY SUBSEQUENT CONSTRUCTION. THE RECORD DOCUMENTS SHALL BE GIVEN TO THE OWNER AT COMPLETION OF TENANT CONSTRUCTION PRIOR TO APPLICATION FOR FINAL PAYMENT.
24. AS A "DESIGN-BUILD" PORTION OF THE CONTRACT, THE CONTRACTOR IS TO ADAPT THE FIRE LIFE SAFETY SYSTEM TO THE NEW BUILDING LAYOUT, INCLUDING FIRE SPRINKLER SYSTEM AND FIRE ALARM SYSTEM INCLUDING STROBES AND HORNS AS REQUIRED BY CODE AND THE LOCAL GOVERNING AGENCY. THIS IS TO INCLUDE ALL WORK NECESSARY TO MEET ALL APPLICABLE CODES AND ORDINANCES. ALL SPRINKLER HEADS TO BE IN DEAD CENTER OF CEILING TILES AND/OR CREATE A SYMMETRICAL PATTERN IN GYP. BD. CEILINGS. ANY WORK TO THE FIRE LIFE SAFETY SYSTEM SHALL BE SUBMITTED TO THE CITY FOR A SEPARATE PERMIT.
25. PEDESTRIANS SHALL BE PROTECTED DURING CONSTRUCTION AND DEMOLITION ACTIVITIES AS REQUIRED BY SECTION 3306, 2019 CBC.
26. EXIT HARDWARE SHALL COMPLY WITH C.B.C. CHAPTER 10 ON EXITING.
27. THE REQUIREMENTS OF UFC ART. 87 SHALL BE FOLLOWED DURING CONSTRUCTION.
28. ADDITIONAL EXIT SIGNS MAY BE REQUIRED AT THE REQUEST OF THE BUILDING INSPECTOR OR FIRE DEPARTMENT FIELD INSPECTOR. GENERAL CONTRACTOR TO PROVIDE UNIT COST AT COMMENCEMENT OF PROJECT.
29. HAZARDOUS MATERIALS STORED AND/OR USED ON SITE WILL NOT EXCEED QUANTITIES LISTED IN CBC SECTION 307.1 (1 & 2).
30. ALL FINISHES SHALL COMPLY WITH TABLE 803.5 OF CBC.

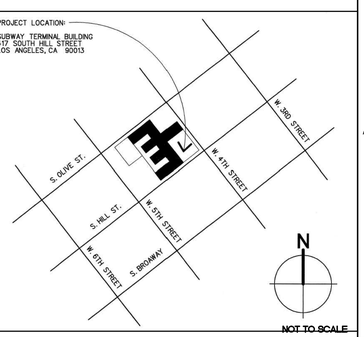
FLOOR PLAN NOTES:

1. NOT USED.
2. ALL PARTITIONS TO BE TYPE 1 U.N.O.
3. INSTALL METAL CORNER BEADS AT ALL EXPOSED WALLBOARD EDGES, INSTALL CASING BEADS WHEREVER WALLBOARD, PLASTER, ETC. ABUTS A DISSIMILAR FINISH MATERIAL AND PROVIDE SEALANT AS REQUIRED.
4. PROVIDE A MINIMUM OF 20 GA. BACKING STUDS AND/OR 18 GA. BY 6" WIDE BACK'G PLATES IN WALLS & CEILINGS WHEN REQUIRED FOR SUPPORT U.O.N.
5. USE 5/8" TYPE 'X' GYP. BD. THROUGHOUT.
6. PROVIDE EXTRA STUDS AS REQUIRED TO MOUNT ELECTRICAL OR MECHANICAL CONTROLS. INSURE STUDS REMAIN PLUMB. CRIMP OR SCREW ATTACH TO RUNNERS AS REQUIRED.
7. REMOVE ALL PINS, NAILS, COAT HOOKS ETC. FROM WALLS. REPAIR ALL EXISTING DRYWALL DAMAGES AND BLEMISHES AND FINISH AS NOTED ON FINISH PLAN.
8. ALL GLASS SHALL BE TEMPERED. ALL EXPOSED EDGES SHALL BE POLISHED.
9. PREPARE SLAB AS REQUIRED FOR SPECIFIED FINISH. SEE FINISH PLAN.
10. NEW BUILDING STANDARD INTERIOR DOOR AND FRAMES SHALL BE FINISHED TO MATCH OWNER SPECIFICATIONS.
11. PATCH AND REPAIR ALL SURFACES DAMAGED AS A RESULT OF ANY WORK PERFORMED ON THIS PROJECT.
12. PREPARE ALL NEW SURFACE TO RECEIVE A NEW FINISH.

DRAWING SYMBOLS LEGEND



VICINITY MAP



ABBREVIATIONS

ø	DIAMETER	C.	CAMBER	E.	EAST	GL.	GLASS	MISC.	MISCELLANEOUS	REQ'D.	REQUIRED	T.P.	TOP OF PARAPET
S.F.	SQUARE FOOT/FEET	CATV.	CABLE TELEVISION	EA.	EACH	GND.	GROUND	M.O.	MASONRY OPENING	RESIL.	RESILIENT	T.S.	TOP OF SHEATHING
@	AT	C.B.	CATCH BASIN	E.C.	EVAPORATIVE COOLER	GR.	GRADE	MTD.	MOUNTED	RM.	ROOM	T.O.W.	TOP OF WALL
℄	CENTERLINE	CEM.	CEMENT	E.J.	EXPANSION JOINT	GYP.	GYPSUM	MTT.	MAIN TELEPHONE TERMINAL	R.H.B.	RECESSED HOSE BIBB	TYP.	TYPICAL
#	POUND OR NUMBER	CER.	CERAMIC	ELEC.	ELECTRICAL			MUL.	MULLION	R.O.	ROUGH OPENING		
(E)	EXISTING	C.H.B.	CONCEALED HOSE BIBB	EL.	ELEVATION	H.B.	HOSE BIB			R.O.W.	RIGHT OF WAY	U.B.C.	UNIFORM BUILDING CODE
		C.I.	CAST IRON	E.P.	ELECTRICAL PANEL	H.C.	HOLLOW CORE	N.	NORTH	R.S.	RE-SAWN	U.O.N.	UNLESS OTHERWISE NOTED
A.B.	ANCHOR BOLT	C.J.	CEILING JOIST	EQ.	EQUAL	HDR.	HEADER	N.I.C.	NOT IN CONTRACT				
ABV.	ABOVE	C.J.	CONTROL JOINT	EQUIP.	EQUIPMENT	HDW.	HARDWARE	NO.	NUMBER	S.	SOUTH	V.B.	VINYL BASE
A/C.	AIR CONDITIONING	CLG.	CEILING	E.W.	EACH WAY	HT.	HEIGHT	NOM.	NOMINAL	S.A.N.	SCALE AS NOTED	VERT.	VERTICAL
A.C.	ASPHALTIC CONCRETE	CLR.	CLEAR	EXIS.	EXISTING	H.M.	HOLLOW METAL	N.T.S.	NOT TO SCALE	S.A.T.	SUSPENDED ACOUSTICAL TILE	V.C.T.	VINYL COMPOSITION TILE
A.D.	AREA DRAIN	C.M.U.	CONCRETE MASONRY UNIT	EXT.	EXTERIOR	HOR.	HORIZONTAL			S.C.	SOLID CORE	V.T.R.	VENT THROUGH ROOF
A/V.	AUDIO/VISUAL	C/O	CLEANOUT			H.P.	HIGH POINT	O.A.	OVERALL	SCHED.	SCHEDULE		
ACOUS.	ACOUSTICAL	C.O.	CONDUIT ONLY	FDN.	FOUNDATION	HTG.	HEATING	O.C.	ON CENTER	SECT.	SECTION	W.	WEST
AFF.	ABOVE FINISH FLOOR	COL.	COLUMN	F.D.	FLOOR DRAIN	HDWD.	HARDWOOD	O.D.	OUTSIDE DIAMETER	SHT.	SHEET	W/	WITH
ALUM.	ALUMINUM	CONC.	CONCRETE	F.F.	FINISH FLOOR	HVAC.	HEATING, VENTILATION AND	OFD.	OVERFLOW DRAIN	SHTG.	SHEATHING	W.C.	WATER CLOSET
APPROX.	APPROXIMATE	CONN.	CONNECTION	FIN.	FINISH		AIR CONDITIONING	OPG.	OPENING	SIM.	SIMILAR	WD.	WOOD
ARCH.	ARCHITECTURAL	CONSTR.	CONSTRUCTION	FIXT.	FIXTURE		INSIDE DIAMETER	OPP.	OPPOSITE	S/LS.	SUPPLY/INSTALLATION	W.H.	WATER HEATER
A.S.R.	AUTOMATIC SPRINKLER SYSTEM	CONT.	CONTINUOUS	FLR.	FLOOR	I.E.	INVERT ELEVATION			SPEC.	SCHEDULE	W/O.	WITHOUT
		CONTR.	CONTRACTOR	F.L.	FLOW LINE	IN.	INCH	PART'N.	PARTITION	SQ.	SPECIFICATION	W.P.J.	WEAKENED PLANE JOINT
A.S.	ABOVE SHEATHING	CTSK	COUNTERSUNK	FLUOR.	FLUORESCENT	INSUL.	INSULATION	P.L.	PROPERTY LINE	SSK.	SQUARE	W.R.	WATER RESISTANT
		C.Y.	CUBIC YARD	F.H.	FIRE HYDRANT	INT.	INTERIOR	PLAS.	PLASTER	SS.	SERVICE SINK	W.W.F.	WELDED WIRE FABRIC
BD.	BOARD			F.O.F.	FACE OF FINISH			PLBG.	PLUMBING	STD.	STAINLESS STEEL		
B.F.	BOTTOM FRAMING	DBL.	DOUBLE	F.O.M.	FACE OF MASONRY	JT.	JOINT	PLYWD.	PLYWOOD	STL.	STANDARD		
BLDG.	BUILDING	DEPT.	DEPARTMENT	F.O.S.	FACE OF SHEATHING			P.O.C.	POINT OF CONNECTION	STOR.	STEEL		
BLK.	BLOCK	DET.	DETAIL	F/S.	FLOOR SINK	K.D.	KNOCK DOWN	POLP.	POLYPROPYLENE	STRUCT.	STORAGE		
BLKG.	BLOCKING	D/F.	DOUGLAS FIR	F.S.R.	FIRE SPRINKLER RISER			PR.	PAIR	S.O.V.	STRUCTURAL		
BM.	BEAM	D.F.	DRINKING FOUNTAIN	FT.	FOOT/FEET	LAM.	LAMINATED	P.T.	PRESSURE TREATED	SYM.	SHUT OFF VALVE		
B.N.	BOUNDARY NAILING	DIA.	DIAMETER	FTG.	FOOTING	LAV.	LAVATORY				SYMMETRICAL		
BOT.	BOTTOM	DIM.	DIMENSION	FURR.	FURRING	LT.	LIGHT	Q.T.	QUARRY TILE				
BTWN.	BETWEEN	DN.	DOWN	FUT.	FUTURE					T.	TREAD		
		DR.	DOOR			MAX.	MAXIMUM	R.	RISER	T.B.	TOP OF BEAM		
		DS.	DOWN SPOUT	GA.	GAUGE	M.B.	MACHINE BOLT	RAD.	RADIUS	TEL.	TELEPHONE		
		DWG.	DRAWING	GALV.	GALVANIZED	MECH.	MECHANICAL	R.D.	ROOF DRAIN	T&G.	TONGUE AND GROOVE		
				G.C.	GENERAL CONTRACTOR	MET.	METAL	RDWD.	REDWOOD	THK.	THICK		
				GI.	GALVANIZED IRON	MFR.	MANUFACTURER	REF.	REFERENCE	T.O.C.	TOP OF CURB		
				G.L.B.	GLU-LAM BEAM	M.H.	MANHOLE	REFR.	REFRIGERATOR				
						MIN.	MINIMUM	REINF.	REINFORCED				

REVISIONS

DATE/DELTA	REMARKS

417 S HILL STREET
HISTORIC REHABILITATION
417 SOUTH HILL STREET
LOS ANGELES, CALIFORNIA

BICKEL GROUP ARCHITECTURE
BICKEL GROUP INCORPORATED
3600 BIRCH STREET, CA 92660
NEWPORT BEACH, CA 92660
P: 949.757.0411 F: 949.757.0511
www.bickelgrp.com

LICENSED ARCHITECT
JAMES R. BICKEL
C-20855
06-30
RENEW DATE
STATE OF CALIFORNIA

The plans, ideas, arrangements and designs indicated or represented by this drawing are owned by, and are the property of BICKEL GROUP, and were created and developed solely for use on, and in connection with this specific project, and shall not be used, in whole or in part, for any purpose for which they were not originally intended without written permission from BICKEL GROUP © 2021

SHEET TITLE:

TITLE SHEET

SUB DATE	06/17/2022
BID DATE	
DATE:	06/13/2022
DRAWN BY:	TA
JOB NO:	21051
CHECKED BY:	EM

SHEET NUMBER:

A-0.0

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Our mission is to provide the highest level of safety, and to protect public health and the environment from toxic harm.

Fact Sheet, January 2010

Universal Waste Fact Sheet

California's Universal Waste Rule allows individuals and businesses to transport, handle and recycle certain common hazardous wastes, termed universal wastes, in a manner that differs from the requirements for most hazardous wastes. The more relaxed requirements for managing universal wastes were adopted to ensure that they are managed safely and are not disposed of in the trash.

What are Universal Wastes?

Universal wastes are hazardous wastes that are widely produced by households and many different types of businesses. Universal wastes include televisions, computers and other electronic devices as well as batteries, fluorescent lamps, mercury thermostats, and other mercury containing equipment, among others.

The hazardous waste regulations (Cal. Code Regs, tit. 22, div. 4.5, ch. 11 section 66261.9) identify seven categories of hazardous wastes that can be managed as universal wastes. Any unwanted item that falls within one of these waste streams can be handled, transported and recycled following the simple requirements set forth in the universal waste regulations (UWR) (Cal. Code Regs, tit. 22, div. 4.5, ch. 23)

Universal wastes are:

1. Electronic devices: Includes any electronic device that is a hazardous waste (with or without a Cathode Ray Tube (CRT)), including televisions, computer monitors, cell phones, VCRs, computer CPUs and portable DVD players.
2. Batteries: Most household-type batteries, including rechargeable nickel-cadmium batteries, silver button batteries, mercury batteries, alkaline batteries and other batteries that exhibit a characteristic of a hazardous waste
3. Electric lamps: Fluorescent tubes and bulbs, high intensity discharge lamps, sodium vapor lamps and electric lamps that contain added mercury, as well as any other lamp that exhibits a characteristic of a hazardous waste. (e.g., lead).
4. Mercury-containing equipment: Thermostats, mercury switches, mercury thermometers, pressure or vacuum gauges, dilators and weighted tubing, mercury rubber flooring, mercury gas flow regulators, dental amalgams, counterweights, dampers and mercury added novelties such as jewelry, ornaments and footwear.
5. CRTs: The glass picture tubes removed from devices such as televisions and computer monitors.
6. CRT glass: A cathode ray tube that has been accidently broken or processed for recycling.
7. Non-empty aerosol cans

Universal Wastes may not be disposed of in the trash!

STATE OF CALIFORNIA

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Our mission is to provide the highest level of safety, and to protect public health and the environment from toxic harm.

Regulatory Standards for Universal Waste

The UWR has separate requirements for of each of the three types of regulated entities:

1. Universal waste handlers
2. Universal waste transporters
3. Destination Facilities

Universal Waste Handlers

A universal waste handler is a generator of universal waste or the owner or operator of a facility that receives universal waste from another universal waste handler, accumulates universal waste, and sends universal waste to another universal waste handler, a facility that accepts hazardous waste, or a foreign country.

A universal waste handler may be:

1. A person (e.g., a household or business) who generates universal waste but does not accept universal waste from others
2. A person who accepts and accumulates universal waste generated by others at his or her facility
3. A person who accepts universal waste generated by others and conducts certain treatment and recycling activities allowed by the universal waste handler regulations

Management Requirements for Universal Waste Handlers (Cal. Code Regs, tit. 22, sections 66273.30-66273.39; additional requirements for handlers who conduct authorized treatment, Cal. Code Regs, tit. 22, sections 66273.70-.77)

- Do not dispose of universal waste or treat universal waste except as provided for in the regulations
- Notify DTSC and/or obtain an EPA identification number
- Use proper containment—non-leaking, compatible containers
- Segregate universal waste in distinct areas
- Determine if materials generated when handling/recycling are hazardous wastes
- Comply with applicable requirements for hazardous waste
- If applicable, comply with zoning requirements when storing universal wastes
- Have spill kits readily available to deal with accidental spills (mercury-containing devices)
- Use proper labeling and markings
- Accumulate universal waste no longer than one year

STATE OF CALIFORNIA

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Our mission is to provide the highest level of safety, and to protect public health and the environment from toxic harm.

- Provide personnel training to personnel who manage universal waste, or who supervise personnel who manage universal waste and keep training records
- Respond to releases of universal waste or its contents; determine if spill residuals are hazardous waste
- Track shipments by keeping records of what was received and shipped (name, address, quantities) for three years

Universal Waste Transporters

A universal waste transporter is a person engaged in the offsite transportation of universal waste by air, rail, highway or water. A universal waste transporter may be:

1. Universal waste handler carrying universal waste in his or her own vehicle
2. A package shipping service (e.g., US Postal Service; FedEx, UPS)
3. A commercial carrier (e.g., a trucking company, a hauler specializing in universal waste, or the operator of a destination facility that offers a universal waste pick-up service)

➢ If you do not own or operate a facility that accepts, generates, accumulates, or stores universal waste, but you pick up and transport universal waste (e.g., electronic devices from office complexes) to a recycling or collection facility, you are a universal waste transporter. Universal waste transporters do not need to notify DTSC or submit annual reports for their transportation activities.

➢ Universal waste transporters may store universal waste at a transfer facility for up to 10 days (depending on local zoning). A universal waste transporter who exceeds this limit is considered a universal waste handler and is subject to the handler requirements summarized above.

Destination Facilities

A destination facility is a fully-regulated hazardous waste facility that treats, disposes of, or recycles a specific type of universal waste. Examples of destination facilities are hazardous waste recycling facilities and hazardous waste landfills. A destination facility shall manage the universal waste in accordance with the requirements and conditions in its hazardous waste facility permit, unless authorized by section 66273.60 of title 22 of the California Code of Regulations to manage it pursuant to the reduced requirements applicable to universal waste handlers. A destination facility is required to follow certain rules for shipping universal wastes off-site and for rejecting shipments that contain universal waste and is required to keep records of all shipments received for three years. A facility that only accepts and accumulates universal waste is not a destination facility. Such a facility is regulated as a universal waste handler.

STATE OF CALIFORNIA

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Our mission is to provide the highest level of safety, and to protect public health and the environment from toxic harm.

Households and Conditionally Exempt Small Quantity Universal Waste Generators (CESQUWG)

Two categories of universal waste handlers—households and CESQUWGs—are exempt from most of the requirements of the universal waste regulations provided they comply with certain conditions. Handlers who qualify for these exemptions are not required:

- To obtain an EPA ID number or otherwise notify DTSC;
- To keep records of shipments or provide annual reports to DTSC; or
- To label their universal waste.

A household is defined to include a single detached residence (e.g., a house) or a single unit of a multiple residence unit (e.g., an apartment or condominium). Households that generate hazardous wastes other than universal wastes (e.g., paints and motor oil) can visit DTSC's household hazardous waste Web page (http://www.dtsc.ca.gov/HazardousWaste/UniversalWaste/HHW.cfm) for information on how to properly dispose of them.

A Conditionally Exempt Small Quantity Universal Waste Generator (CESQUWG) is a universal waste generator who produces less than 100 kilograms (220 pounds) of RCRA hazardous waste, including universal waste that is RCRA universal waste and less than 1 kilogram of acutely hazardous waste in a calendar month. (RCRA hazardous waste is hazardous waste that is regulated under the hazardous waste regulations adopted by the U.S. Environmental Protections Agency.)

Pursuant to section 66273.8 of title 22 of the California Code of Regulations, a generator who meets the definition of a household or a CESQUWG is exempt from universal waste handler requirements provided he or she:

1) Does not dispose of universal waste;
2) Relinquishes universal waste only to another universal waste handler, a universal waste transporter, a destination facility, or a curbside household hazardous waste collection program; and
3) Does not conduct treatment of universal waste, except for limited activities enumerated in the regulations (e.g., removing batteries, light bulbs, or mercury switches). This exemption applies only to universal waste generated by the household (e.g. light bulbs, computers, televisions, thermostats, cell phones, etc.), not to universal waste accepted from other people.

Where can I send universal wastes?

A handler may not send universal waste to a municipal solid waste (garbage) landfill or a non-hazardous waste recycling center. All handlers of universal waste must relinquish their universal waste to one of the following:

STATE OF CALIFORNIA

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Our mission is to provide the highest level of safety, and to protect public health and the environment from toxic harm.

1. Another handler (typically a business that specializes in collecting, storing, accumulating and shipping universal wastes). Examples:
   - A household hazardous waste facility
   - A "Take-it-Back Partner" such as a retailer or manufacturer
   - A collection event
2. A universal waste transporter. Examples:
   - A curbside HHW collection program
   - A package service (e.g., postal service, UPS)
   - A destination facility that offers a pick-up service
3. A universal waste destination facility (generally, a facility with a permit to treat, store, or dispose of hazardous waste).

Search engines available to find locations accepting universal waste in your area: E-Recycle.org; Earth911.org; CalRecycle database; DTSC map; HHW list;

For more information, see DTSC's Universal Waste Web page at: http://www.dtsc.ca.gov/HazardousWaste/UniversalWaste/index.cfm

Contact your DTSC regulatory assistance officer at: (800) 728-6942

STATE OF CALIFORNIA

CITY LA DBS DEPARTMENT OF BUILDING AND SAFETY

2020 Los Angeles Green Building Code — FORM GRN 10

MANDATORY REQUIREMENTS CHECKLIST

ADDITIONS AND ALTERATIONS TO NON-RESIDENTIAL BUILDINGS

(COMPLETE AND INCORPORATE THIS FORM INTO THE PLANS)

Permit # ____ - ____ - ____ Date: 06/07/2022

ITEM #	CODE SECTION	REQUIREMENTS	REFERENCE SHEET (Sheet # or N/A)	COMMENTS (e.g. note #, detail # or reason for N/A)
		PLANNING AND DESIGN		
1	5.106.1	Storm water drainage and retention during construction	N/A	NO GRADING PROPOSED
2	5.106.4.1.1	Short-term bicycle parking (≥ 10 vehicular parking spaces)	N/A	NO NEW PARKING
3	5.106.4.1.2	Long-term bicycle parking (≥ 10 vehicular parking spaces)	N/A	NO NEW PARKING
4	5.106.5.2	Designated parking (≥ 10 vehicular parking spaces)	N/A	NO NEW PARKING
5	5.106.10	Grading and Paving	N/A	NO GRADING PROPOSED
		ENERGY EFFICIENCY		
6	5.211.1	Solar ready (additions ≥ 2,000 sq. ft.)	N/A	E.T.R. BUILDING
		WATER EFFICIENCY & CONSERVATION		
7	5.303.1.1	Additions in excess of 50,000 sq. ft.	N/A	E.T.R. BUILDING
8	5.303.1.2	Excess consumption	N/A	NO NEW PLUMBING
9	5.303.2	Water reduction	N/A	NO NEW PLUMBING
10	5.303.3	Water conserving plumbing fixtures and fittings	N/A	NO NEW PLUMBING
11	5.303.3.3	Showerheads	N/A	NO SHOWERHEAD
12	5.304.1	Outdoor water use in landscape areas	N/A	NO NEW L/S
13	5.304.3	Irrigation controller and sensor application	N/A	NO NEW L/S
14	5.304.4	Outdoor water use meters	N/A	E.T.R. BUILDING
15	5.304.5	Exterior faucets	N/A	NO EXT. FAUCETS
16	5.305.1	Graywater ready	N/A	E.T.R. BUILDING
17	5.305.2	Recycled water supply to fixtures	N/A	E.T.R. BUILDING
		MATERIAL CONSERVATION & RESOURCE EFFICIENCY		
18	5.407.1	Weather protection	N/A	NO NEW WALLS
19	5.407.2.1	Sprinklers	N/A	NO L/S
20	5.407.2.2.1	Nonabsorbent floor and wall finishes	A-0.1	GRN 15 NOTE#10
21		Exterior door protection	N/A	E.T.R.
22	5.407.2.2.2	Flashing	N/A	E.T.R.
23	5.408.1	Construction waste reduction	A-0.1	GRN 15 NOTE#12 & CGBC CONTRACTOR NOTES 1-4
24	5.408.3	Excavated soil and land clearing debris	N/A	NO GRADING PROPOSED

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities.

(Rev. 02/12/2020) Page 1 of 2 www.ladbs.org

CITY LA DBS DEPARTMENT OF BUILDING AND SAFETY

2020 Los Angeles Green Building Code — FORM GRN 10

ITEM #	CODE SECTION	REQUIREMENTS	REFERENCE SHEET (Sheet # or N/A)	COMMENTS (e.g. note #, detail # or reason for N/A)
25	5.410.1	Recycling by occupants (additions that are > 30% of existing floor area)	N/A	E.T.R. BUILDING
26	5.410.4	Testing, adjusting and balancing	N/A	NO MECHANICAL PROPOSED
27	5.410.4.2	– Systems	N/A	
28	5.410.4.3	– Procedures	N/A	
29	5.410.4.4	– Reporting	N/A	
30	5.410.4.5	– Operation and maintenance manual	N/A	
31	5.410.4.5.1	– Inspections and reports	N/A	
		ENVIRONMENTAL QUALITY		
32	5.503.1	Fireplace and Woodstoves	N/A	NOT IN SCOPE
33	5.504.1.3	Temporary ventilation	A-0.1	NO MECHANICAL PROPOSED
34	5.504.3	Covering of duct openings and protection of mechanical equipment during construction	A-0.1	NO MECHANICAL PROPOSED
35	5.504.4	Finish material pollutant control	A-0.1	GRN 15 NOTE#19
36	5.504.4.1	– Adhesives, sealants, and caulks		
37	5.504.4.3	– Paints and coatings		
38	5.504.4.3.1	– Aerosol paints and coatings		
39	5.504.4.3.2	– Verification	A-0.1	GRN 15 NOTE#20
40	5.504.4.4	Carpet systems	N/A	NOT IN SCOPE
41	5.504.4.4.1	Carpet cushion	N/A	NOT IN SCOPE
42	5.504.4.5	Composite wood products	A-0.1	GRN 15 NOTE# 23 & 24
43	5.504.4.6	Resilient flooring systems	N/A	GRN 15 NOTE#25
44	5.504.5.3	Filters	A-0.1	GRN 15 NOTE # 26 & 27
45	5.504.7	Environmental tobacco smoke (ETS) control	A-0.1	GRN 15 NOTE # 28
46	5.505.1	Indoor moisture control	N/A	NO NEW MECHANICAL
47	5.506.2	Carbon dioxide (CO_2) monitoring	A-0.1	GRN 15 NOTE # 29
48	5.507.4.1	Exterior noise transmission prescriptive method	N/A	E.T.R. BUILDING
49		– Exterior noise transmission for roof	N/A	E.T.R. BUILDING
50		– Exterior noise transmission for walls	N/A	E.T.R. BUILDING
51		– Exterior noise transmission for windows	N/A	E.T.R. BUILDING
52	5.507.4.2	Exterior noise transmission performance method	N/A	E.T.R. BUILDING
52	5.507.4.3	Interior sound transmission	N/A	E.T.R. BUILDING
53	5.508.1	Ozone depletion and greenhouse gas reductions	N/A	NO NEW MECHANICAL
54	5.508.2	Supermarket refrigerant leak reduction	N/A	NOT IN SCOPE

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities.

(Rev. 02/12/2020) Page 2 of 2 www.ladbs.org

CITY LA DBS DEPARTMENT OF BUILDING AND SAFETY

VOC AND FORMALDEHYDE LIMITS — FORM GRN 11

2020 Los Angeles Green Building Code

(Incorporate this form into the plans)

2020 Los Angeles Green Building Code Tables 4.504.1, 4.504.2, 4.504.3, 4.504.5, 5.504.4.1, 5.504.4.2, 5.504.4.3, 5.504.4.5

VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS [2,3]
Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds

COATING CATEGORY [2,3]	CURRENT LIMIT
Flat coatings	50
Nonflat coatings	50
Nonflat-high gloss coatings	50
Specialty Coatings	
Aluminum roof coatings	100
Basement specialty coatings	400
Bituminous roof coatings	50
Bituminous roof primers	350
Bond breakers	350
Concrete curing compounds	100
Concrete curing compounds, Roadways & Bridges	350
Concrete/masonry sealers	100
Driveway sealers	50
Dry fog coatings	50
Faux finishing coatings	
Clear Top Coat	100
Decorative Coatings	350
Glazes	350
Japan	350
Trowel Applied Coatings	50
Fire resistive coatings	150
Floor coatings	50
Form-release compounds	100
Graphic arts coatings (sign paints)	200
High temperature coatings	420
Industrial maintenance coatings	100
Low solids coatings[1]	120
Magnesite cement coatings	450
Mastic texture coatings	100
Metallic pigmented coatings	150
Multicolor coatings	250
Pretreatment wash primers	420
Primers, sealers, and undercoaters	100
Reactive penetrating sealers	350
Recycled coatings	250
Roof coatings	50
Roof coatings, aluminum	100
Rust preventative coatings	100
Shellacs	
Clear	730
Opaque	550
Specialty primers, sealers and undercoaters	100
Stains	100
Stains, Interior	250
Stone consolidants	450
Swimming pool coatings	340
Traffic marking coatings	100
Tub and tile refinish coatings	420
Waterproofing membranes	100
Wood coatings	275
Wood preservatives	350
Zinc-rich primers	100

[1] Grams of VOC per liter of coating, including water and including exempt compounds.
[2] The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
[3] Some values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 5, 2016. More information is available from the Air Resources Board.

FORMALDEHYDE LIMITS[1]
Maximum Formaldehyde Emissions in Parts per Million

PRODUCT	CURRENT LIMIT
Hardwood plywood veneer core	0.05
Hardwood plywood composite core	0.05
Particleboard	0.09
Medium density fiberboard	0.11
Thin medium density fiberboard[2]	0.13

[1] Values in this table are derived from those specified by the California Air Resources Board, Air Toxics Control Measure for Composite Wood as tested in accordance with ASTM E 1333. For additional information, see California Code of Regulations, Title 17, Sections 93120 through 93120.12.
[2] Thin medium density fiberboard has a maximum thickness of 5/16 inches (8 mm).

SEALANT VOC LIMIT
Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	CURRENT VOC LIMIT
Architectural	50
Marine deck	760
Nonmembrane roof	300
Roadway	250
Single-ply roof membrane	450
Other	420
SEALANT PRIMERS	
Architectural	
Nonporous	250
Porous	775
Modified bituminous 500	500
Marine deck	760
Other	750

Note: For additional information regarding methods to measure the VOC content specified in these tables, see South Coast Air Quality Management District Rule 1168.

ADHESIVE VOC LIMIT 1,2
Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
Indoor carpet adhesives	50
Carpet pad adhesives	50
Outdoor carpet adhesives	150
Wood flooring adhesive	100
Rubber floor adhesives	60
Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesives not specifically listed	50
SPECIALTY APPLICATIONS	
PVC welding	510
CPVC welding	490
ABS welding	325
Plastic cement welding	100
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Top and trim adhesive	250
SUBSTRATE SPECIFIC APPLICATIONS	
Metal to metal	30
Plastic foams	50
Porous material (except wood)	50
Wood	30
Fiberglass	80

[1] If an adhesive is used to bond dissimilar substrates together, the adhesive with the highest VOC content shall be allowed.
[2] For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168, http://www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF.

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities.

(Rev. 01/01/20) Page 1 of 1 www.ladbs.org

CITY LA DBS DEPARTMENT OF BUILDING AND SAFETY

2020 Los Angeles Green Building Code — FORM GRN 15

GREEN BUILDING CODE PLAN CHECK NOTES

NON-RESIDENTIAL BUILDINGS

1. State on plans that the outdoor lighting systems shall be designed and installed to comply with all of the following:
   a. The minimum requirements in California Energy Code for Lighting Zones 1-4
   b. Backlight, Uplight and Glare (BUG) ratings as defined in IESNA TM-15-11
   c. Allowable BUG ratings not exceeding those shown in on Table 5.106.8. (5.106.8)
2. Separate submeters shall be installed in any building or new space within a building that is projected to consume more than 1,000 gal/day. (5.303.1.2)
3. New plumbing fixtures and fittings shall not exceed the maximum allowable flow rate specified in Section 5.303.3. (5.303.3)
4. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 2.0 gallons per minute at 80psi, or the shower shall be designed to only allow one showerhead to be in operation at a time. (5.303.3.3)
5. For projects that include landscape work, the *Landscape Certification*, Form GRN 12, shall be completed prior to final inspection approval. (State Assembly Bill No. 1881)
6. Installed automatic irrigation system controllers are weather- or soil-based controllers. (WMELO, § 492.7)
7. Weather-resistant exterior wall and foundation envelope shall be detailed in conformance with Los Angeles Building Code Section 1403.2 and California Energy Code Section 150. (5.407.1)
8. Automatic landscape irrigators shall be installed such that it doesn't spray on the structure. (5.407.2.1)
9. New exterior entries and openings subject to foot traffic shall be protected against water intrusion using features such as overhangs, awnings and/or recesses for a combined depth over the entry of at least 4 feet. (5.407.2.2.1)
10. Nonabsorbent interior floor and wall finishes shall be used within at least two feet around and perpendicular to new exterior entries and/or opening subject to foot traffic. (5.407.2.2.1)
11. Exterior entries shall have flashing integrated with the drainage plane. (5.407.2.2.2)
12. Only a City of Los Angeles certified hauler will be used for hauling of construction waste. (5.408.1)
13. 100% of excavated soil and vegetation resulting from land clearing shall be reused or recycled. (5.408.3)
14. A final report for the testing and adjusting of all new systems shall be completed and provided to the field inspector prior to final approval. This report shall be signed by the individual responsible for performing these services. (5.410.4.4)
15. For all new equipment, an *Operation & Systems Manual* shall be provided to the owner and the field inspector at the time of final inspection. (5.410.4.5)
16. All new gas fireplaces must be direct-vent, sealed combustion type. Wood burning fireplaces are prohibited per AQMD Rule 445. (5.503.1, AQMD Rule 445)
17. If the new HVAC system is used during construction, use return air filters with a MERV of 8. Replace all filters immediately prior to occupancy. (5.504.1.3)
18. All new ducts and other new related air distribution components openings shall be covered with tape, plastic, or sheet metal until the final startup of the heating, cooling and ventilating equipment. (5.504.3)
19. Architectural paints and coatings, adhesives, caulks and sealants shall comply with the Volatile Organic Compound (VOC) limits listed in Tables 5.504.4.1-5.504.4.3. (5.504.4.1- 5.504.4.3)
20. The *VOC Content Verification Checklist*, Form GRN 2, shall be completed and verified prior to final inspection approval. The manufacturer's specifications showing VOC content for all applicable products shall be readily available at the job site and be provided to the field inspector for verification. (5.504.4.3.2)
21. All new carpet installed in the building interior meets the testing and product requirements of one of the following:
    a. Carpet and Rug Institute's Green Label Plus Program
    b. California Department of Public Health's Specification 01350
    c. NSF/ANSI 140 at the Gold level
    d. Scientific Certifications Systems Indoor Advantage™ Gold (5.504.4.4)
22. All new carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label program. (5.504.4.4.1)
23. New hardwood plywood, particle board, and medium density fiberboard composite wood products used in the interior or exterior of the building shall meet the formaldehyde limits. (5.504.4.5, 10.504.4.5)
24. The *Formaldehyde Emissions Verification Checklist*, Form GRN 3, shall be completed prior to final inspection approval. The manufacturer's specifications showing formaldehyde content for all applicable wood products shall be readily available at the job site and be provided to the field inspector for verification. (5.504.4.5)
25. 80% of the total area receiving new resilient flooring shall comply with one or more of the following:
    a. VOC emission limits defined in the CHPS High Performance Products Database
    b. Certified under UL GREENGUARD Gold
    c. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program
    d. Meet the California Department of Public Health's Specification 01350 (5.504.4.6)
26. Mechanically ventilated buildings shall have air filter with a Minimum Efficiency Reporting Value (MERV) of 13 or higher. Filters shall be installed prior to occupancy and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual. (5.504.5.3)
27. Designated outdoor smoking area shall be at least 25 feet from an outdoor air intake or operable windows. (5.504.7)
28. Buildings shall meet or exceed the provisions of California Building Code, CCR, Title 24, Part 2 Sections 1202 (Ventilation) and Chapter 14 (Exterior Walls). For additional measures, see Section 5.407.2 (5.505.1)
29. Buildings that use Demand Control Ventilation shall have CO_2 sensors and ventilation controls installed in accordance with the requirements of the current edition of the California Energy Code, CCR, Title 24, Part 6, Section 121(c). (5.506.2)
30. The HVAC, refrigeration, and fire suppression equipment shall not contain CFC or Halons. (5.508.1)
31. Retail food stores of 8,000 sq. ft. or more of conditioned area that have a commercial refrigeration system with a global warming potential (GWP) of 150 or greater shall have leak reduction measures in accordance with LAGBC Section 5.508.2. Separate mechanical plan check is required. (5.508.2)

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities.

(Rev. 01/01/20) Page 1 of 1 www.ladbs.org

CGBC CONTRACTOR NOTES:

① CONTRACTOR SHALL REDUCE CONSTRUCTION WASTE BY RECYCLING OR SALVAGING BY FOR RE-USE A MINIMUM OF 65% OF THE CONSTRUCTION AND DEMOLITION DEBRIS, OR MEET THE LOCAL CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT ORDINANCE WHICHEVER IS MORE STRINGENT PER CGBC 5.408.1

② PER CGBC 5.408.1.1 CONTRACTOR TO DEVELOP AND SUBMIT TO THE ENFORCEMENT AGENCY A CONSTRUCTION WASTE MANAGEMENT PLAN THAT:
1. IDENTIFIES THE MATERIALS TO BE DIVERTED FROM DISPOSAL BY EFFICIENT USAGE, RECYCLING, REUSE ON THE PROJECT OR SALVAGE FOR FUTURE USE OR SALE.
2. DETERMINES IF MATERIALS WILL BE SORTED ON SITE OR MIXED.
3. IDENTIFIES THE DIVERSION FACILITIES WHERE MATERIAL COLLECTED WILL BE TAKEN.
4. SPECIFIES THAT THE AMOUNT OF MATERIALS DIVERTED SHALL BE CALCULATED BY WEIGHT OR VOLUME, BUT NOT BY BOTH.

CONTRACTOR SHALL UTILIZE A WASTE MANAGEMENT COMPANY THAT CAN PROVIDE VERIFIABLE DOCUMENTATION THAT THE PERCENTAGE OF MATERIALS DIVERTED FROM THE LANDFILL COMPLY WITH THIS SECTION.
CONTRACTOR SHALL ALSO DEVELOP AND SUBMIT DOCUMENTATION TO THE ENFORCEMENT AGENCY, DEMONSTRATING COMPLIANCE WITH THIS CONSTRUCTION WASTE MANAGEMENT PLAN PER CGBC 5.408.1.4

③ ADDITIONS AND ALTERATIONS MEETING THE SCOPING PROVISIONS OF CGBC 301.3 SHALL REQUIRE VERIFIVATION THAT UNIVERSAL WASTE ITEMS AS NOTED IN UNIVERSAL WASTE NOTES ARE DISPOSED OF PROPERTY AND DELIVERED FROM LANDFILLS.

④ 100% OF TREES, STUMPS, ROCKS, AND ASSOCIATED VEGETATION AND SOILS RESULTING PRIMARILY FROM LAND CLEARING SHALL BE REUSED OR RECYCLED PER CGBC 5.408.3

⑤ PER CGBC 5.410.2, FOR NEW BUILDINGS 10,000 SF AND OVER, BUILDING COMMISSIONING SHALL BE INCLUDED IN THE DESIGN AND PROGRESS OF THE BUILDING PROJECT TO VERIFY THAT THE BUILDING SYSTEMS AND COMPONENTS MEET THE OWNERS OR OWNERS REPRESENTATIVES PROJECT REQUIREMENTS. COMMISSIONING SHALL BE PERFORMED IN ACCORDANCE WITH THIS SECTION BY TRAINED PERSONNEL WITH EXPERIENCE ON PROJECT OF COMPARABLE SIZE AND COMPLEXITY. COMMISSIONING REQUIREMENTS SHALL INCLUDE:
1. OWNER'S OR OWNER REPRESENTATIVE'S PROJECT REQUIREMENTS
2. BASIS OF DESIGN
3. COMMISSIONING MEASURES SHOWN IN THE CONSTRUCTION DOCUMENTS
4. COMMISSIONING PLAN
5. FUNCTIONAL PERFORMANCE TESTING
6. DOCUMENTATION AND TRAINING
7. COMMISSIONING REPORT
8. TESTING AND ADJUSTING

⑥ PER CGBC 5.410.4.2, FOR BUILDINGS LESS THAN 10,000 SF, CONTRACTOR SHALL DEVELOP A WRITTEN PLAN OF PROCEDURES FOR TESTING AND ADJUSTING THE FOLLOWING SYSTEMS:
1. HVAC SYSTEMS AND CONTROLS
2. INDOOR AND OUTDOOR LIGHTING AND CONTROLS
3. WATER HEATING SYSTEMS
4. RENEWABLE ENERGY SYSTEMS
5. LANDSCAPE IRRIGATION SYSTEMS
6. WATER REUSE SYSTEMS

⑦ HVAC SYSTEM SHALL BE BALANCED IN ACCORDANCE WITH APPROVED NATIONAL STANDARDS PER CGBC 5.410.4.3.1

⑧ AFTER COMPLETION OF TESTING, ADJUSTING AND BALANCING. CONTRACTOR TO PROVIDE A FINAL REPORT OF TESTING SIGNED BY THE RESPONSIBLE FOR PERFORMING THESE SERVICES PER CGBC 5.410.4.4

⑨ CONTRACTOR TO PROVIDE BUILDING OWNER OR REPRESENTATIVE WITH AN OPERATION AND MAINTENANCE MANUAL WITH CONTENT PER CGBC 5.410.4.5. A COPY OF THE OPERATION AND MAINTENANCE MANUAL SHALL BE PLACED IN THE BUILDING AT THE TIME OF FINAL INSPECTION.

⑩ ALL DUCT OPENINGS AND OTHER AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE PROTECTED DURING STORAGE ON THE CONSTRUCTION UNTIL FINAL STARTUP WITH TAPE, PLASTIC, SHEET METAL, OR OTHER ACCEPTABLE METHODS TO REDUCE THE AMOUNT OF DUST AND DEBRIS WHICH MAY COLLECT IN THE SYSTEM PER CGBC 5.504.3

11 CONTRACTOR TO INCLUDE A COPY OF ALL INSPECTION VERIFICATIONS AND REPORTS REQUIRED BY ENFORCING AGENCY PER CGBC 5.410.4.5.1

NOTES:

1. OUTDOOR LIGHTING SYSTEM SHALL BE DESIGNED AND INSTALLED TO COMPLY WITH ALL OF THE FOLLOWING:
   a. THE MINIMUM REQUIREMENTS IN CALIFORNIA ENERGY CODE FOR LIGHTING ZONES 1-4
   b. BACKLIGHT, UPLIGHT AND GLARE (BUG) RATINGS AS DEFINED IN IESNA TM-15-11
   c. ALLOWABLE BUG RATING NOT EXCEEDING THOSE SHOWN IN ON TABLE 5.106.8
2. A COPY OF THE CONSTRUCTION DOCUMENTS OR A COMPARABLE DOCUMENT INDICATING THE INFORMATION FROM ENERGY CODE SECTION 110.10(b) THROUGH 110.10(c) SHALL BE PROVIDED TO THE OCCUPANT. (ENERGY CODE 110.10(d))
3. FOR BUILDINGS IN EXCESS OF 50,000 sq. ft., SEPARATE SUBMETERS SHALL BE INSTALLED AS FOLLOWS:
   a. FOR EACH INDIVIDUAL LEASED, RENTED OR OTHER TENANT SPACE WITHIN THE BUILDING PROJECTED TO CONSUME MORE THAN 100 HAL/DAY.
   b. WHERE METERS FOR INDIVIDUAL BUILDINGS TENANTS ARE INFEASIBLE, FOR WATER SUPPLIED TO THE FOLLOWING SUBSYSTEMS:
   i. MAKEUP WATER FOR COOLING TOWERS WHERE FLOW THROUGH IS GRATER THAN 500 GPM.
   ii. MAKEUP WATER FOR EVAPORATED COOLERS GRATER THEN 6 GPM.
   iii. STEAM AND HOT-WATER BOILERS WITH ENERGY INPUT MORE THAN 500,000 Btu/h.
   c. FOR EACH BUILDING THAT USES MORE THAN 100 GALLONS DAY ON A PARCEL CONTAINING MULTIPLE BUILDINGS (5.303.1.1.)
4. LOCKS SHALL BE INSTALLED ON ALL PUBLICLY ACCESSIBLE EXTERIOR FAUCETS AND HOSE BIBS. (5.304.5)
5. FOR SITES OVER 500 SQUARE FEET OF LANDSCAPE AREA, WASTE PIPING SHALL BE ARRANGED TO PERMIT DISCHARGE FROM THE CLOTHES WASHER, BATHTUB, SHOWERS, AND BATHROOM/RESTROOMS WASH BASINS TO BE USED FOR A FUTURE GRAYWATER IRIGATION SYSTEMS. (5.305.1)
6. WATER USED IN THE BUILDING FOR WATER CLOSETS, URINALS, FLOOR DRAINS, AND PROCESS COOLING AND HEATING SHALL COME FROM CITY-RECYCLE WATER IF AVAILABLE FOR USE WITHIN 200 FEET OF THE PROPERTY LINE. (5.302.2)
7. COOLING TOWERS SHALL HAVE A MIN. OF 6 CYCLES OF CONCENTRATION (BLOWDOWN) OR HAVE A MIN. OF 50% OF MAKEUP WATER SUPPLY TO COOLING TOWERS COME FROM NON-POTABLE WATER SOURCES. (5.305.3)
8. WHERE GROUNDWATER IS BEING EXTRACTED AND DISCHARGED, A SYSTEM FOR ONSITE REUSE OF THE GROUNDWATER SHALL BE DEVELOPED AND CONSTRUCTED IF THE GROUNDWATER WILL NOT BE DISCHARGED TO THE SEWER. (4.305.4)
9. AN AIR FILTER WITH MIN. EFFICIENCY REPORTING VALUE (MERV) OF 8 OR HIGHER SHALL BE INSTALLED IN THE MECHANICAL SYSTEM FOR OUTSIDE AND RETURN AIR PRIOR TO OCCUPANCY. (5.504.5.3)
10. THE BUILDING SHALL MEET OR EXCEED THE PROVISIONS FOR MECHANICAL VENTILATION OF SECTION 1302 OF THE LOS ANGELES BUILDING CODE. (5.505.1)
11. BUILDING IS NOT LOCATED WITHIN 1000' OF A FREEWAY, 5MI. OF AN AIRPORT, NOR IN A LOCATION WHERE THE SOUND LEVEL AT THE PROPERTY LINE EXCEEDS 65 DECIBELS.
12. BUILDING IS NOT EXPOSED TO A NOISE LEVEL OF 65 DECIBELS Leq-1hr DURING ANY HOUR OF OPERATION.

REVISIONS	
DATE/DELTA	REMARKS

417 S HILL STREET HISTORIC REHABILITATION

417 SOUTH HILL STREET LOS ANGELES, CALIFORNIA

BICKEL GROUP ARCHITECTURE
BICKEL GROUP INCORPORATED
3600 BIRCH STREET, SUITE 120
NEWPORT BEACH, CA 92660
P: 949.757.0411 F: 949.757.0511
www.bickelgrp.com

LICENSED ARCHITECT JAMES S. BICKEL C-20925 RENEWAL DATE 06-23 STATE OF CALIFORNIA

The plans, ideas, arrangements and designs indicated or represented by this drawing are owned by, and are the property of BICKEL GROUP, and were created and developed solely for use on, and in connection with, this specific project, and shall not be used, in whole or in part, for any purpose for which they were not originally intended without written permission from BICKEL GROUP © 2021

SHEET TITLE:

CA GREEN BUILDING NOTES

SUB DATE	06/07/2022
BID DATE	
DATE:	05/23/2022
DRAWN BY:	TA
JOB NO:	21051
CHECKED BY:	EM
SHEET NUMBER:	A-0.1

SPECIAL PROCEDURES FOR HISTORIC TREATMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes special procedures for historic treatment on Project including, but not limited to, the following:

1. Storage and protection of existing historic materials.
2. Temporary protection of historic materials during construction.
3. Protection during application of chemicals.
4. Protection during use of heat-generating equipment.
5. Historic treatment procedures.

B. Related Sections include the following:

1. ADD HERE ANY RELATED SECTIONS AS NECESSARY

1.3 DEFINITIONS

A. "Preservation": To apply measures necessary to sustain the existing form, integrity, and materials of a historic property. Work may include preliminary measures to protect and stabilize the property.

B. "Rehabilitation": To make possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values.

C. "Restoration": To accurately depict the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and the reconstruction of missing features from the restoration period.

D. "Reconstruction": To reproduce in the exact form and detail a building, structure, or artifact as it appeared at a specific period in time.

E. "Stabilize": To apply measures designed to reestablish a weather-resistant enclosure and the structural reinforcement of an item or portion of the building while maintaining the essential form as it exists at present.

F. "Protect and Maintain": To remove deteriorating corrosion, reapply protective coatings, and install protective measures such as temporary guards; to provide the least degree of intervention.

G. "Repair": To stabilize, consolidate, or conserve; to retain existing materials and features while employing as little new material as possible. Repair includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials. Within restoration, repair also includes limited replacement in kind, rehabilitation, and reconstruction, with compatible substitute materials for deteriorated or missing parts of features when there are surviving prototypes.

H. "Replace": To duplicate and replace entire features with new material in kind. Replacement includes the following conditions:

1. Duplication: Includes replacing elements damaged beyond repair or missing. Original material is indicated as the pattern for creating new duplicated elements.
2. Replacement with New Materials: Includes replacement with new material when original material is not available as patterns for creating new duplicated elements.
3. Replacement with Substitute Materials: Includes replacement with compatible substitute materials. Substitute materials are not allowed, unless otherwise indicated.

I. "Remove": To detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled.

J. "Remove and Salvage": To detach items from existing construction and deliver them to Owner.

K. "Remove and Reinstall": To detach items from existing construction, repair and clean them for reuse, and reinstall them where indicated.

L. "Existing to Remain" or "Retain": Existing items of construction that are not to be removed and that are not otherwise indicated to be removed and salvaged, or removed and reinstalled.

M. "Material in Kind": Material that matches existing materials, as much as possible, in species, cut, color, grain, and finish.

1.4 SUBMITTALS

A. Historic Treatment Program: Submit a written plan for each phase or process including protection of surrounding materials during operations. Describe in detail materials, methods, and equipment to be used for each phase of work.

B. Alternative Methods and Materials: If alternative methods and materials to those indicated are proposed for any phase of work, provide a written description including evidence of successful use on other, comparable projects, and program of testing to demonstrate effectiveness for use on this Project.

C. Qualification Data: For historic treatment specialists and supervisory personnel. Include list of completed projects with the scope of work and budget for each.

D. Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by historic treatment operations. Submit before work begins.

E. Record Documents: Include modifications to manufacturer's written instructions and procedures, as documented in the historic treatment preconstruction conference and as the Work progresses.

PART 2 - PRODUCTS - (Not Used)

PART 3 - EXECUTION

3.1 PROTECTION, GENERAL

A. Comply with manufacturer's written instructions for precautions and effects of products and procedures on adjacent building materials, components, and vegetation.

B. Ensure that supervisory personnel are present when work begins and during its progress.

C. Temporary Protection of Historic Materials during Construction:

1. Protect existing materials during installation of temporary protections and construction. Do not deface or remove existing materials.
2. Attachments of temporary protection to existing construction shall be approved by Architect prior to installation.

D. Review and coordinate with Architect and Landscape Architect to protect landscape work adjacent to or within work areas as follows:

1. Provide barriers to protect tree trunks.
2. Bind spreading shrubs.
3. Use coverings that allow plants to breathe and remove coverings at the end of each day. Do not cover plant material with a waterproof membrane for more than 8 hours at a time.
4. Set scaffolding and ladder legs away from plants.

E. Existing Drains: Prior to the start of work or any cleaning operations, test drains and other water removal systems to ensure that drains and systems are functioning properly. Notify Architect immediately of drains or systems that are stopped or blocked. Do not begin Work of this Section until the drains are in working order.

1. Provide a method to prevent solids including stone or mortar residue from entering the drains or drain lines. Clean out drains and drain lines that become blocked or filled by sand or any other solids because of work performed under this Contract.
2. Protect storm drains from pollutants. Block drains or filter out sediments, allowing only clean water to pass.

1.5 QUALITY ASSURANCE

A. Historic Treatment Specialist Qualifications: A firm that employs personnel, including supervisory personnel, experienced and skilled in the processes and operations indicated.

B. Historic Treatment Preconstruction Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination."

1. Review manufacturer's written instructions for precautions and effects of products and procedures on building materials, components, and vegetation.

a. Record procedures established as a result of the review and distribute to affected parties.

1.6 STORAGE AND PROTECTION OF HISTORIC MATERIALS

A. Removed and Salvaged Historic Materials:

1. Clean salvaged historic items.
2. Pack or crate items after cleaning. Identify contents of containers.
3. Store items in a secure area until delivery to Owner.
4. Transport items to Owner's storage area designated by Owner.
5. Protect items from damage during transport and storage.
6. Do not dispose of items removed from existing construction without prior written consent of Owner.

B. Removed and Reinstalled Historic Materials:

1. Clean and repair historic items to functional condition adequate for intended reuse.
2. Pack or crate items after cleaning and repairing. Identify contents of containers.
3. Protect items from damage during transport and storage.
4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

C. Existing Historic Materials to Remain: Protect construction indicated to remain against damage and soiling during historic treatment. When permitted by Architect, items may be removed to a suitable, protected storage location during historic treatment and cleaned and reinstalled in their original locations after historic treatment operations are complete.

D. Storage and Protection: When removed from their existing location, store historic materials within a weather tight enclosure where they are protected from wetting by rain, snow, or ground water, and temperature and humidity ranges that are appropriate for the items stored. Secure stored materials to prevent theft. Historic materials are irreplaceable; therefore, protective custody is essential. Damage and loss shall be prevented, since repair and replacement may not be possible. These requirements apply to any subcontractors or others given custody of the items.

1. Identify removed items with an inconspicuous or reversible mark indicating their original location.

1.7 PROJECT-SITE CONDITIONS

A. Exterior Cleaning and Repairing:

1. Proceed with the work only when forecasted weather conditions are favorable.

a. Wet Weather: Do not attempt repairs during rainy or foggy weather. Do not apply primer, paint, putty, or epoxy when the relative humidity is above 80 percent. Do not remove exterior elements of structures when rain is forecast or in progress.
b. Do not perform exterior wet work when the air temperature is below 40 deg F (5 deg C).
c. Do not begin cleaning, patching, or repairing when there is any likelihood of frost or freezing.
d. Do not begin cleaning when either the air or the surface temperature is below 45 deg F (7 deg C) unless approved means are provided for maintaining a 45 deg F (7 deg C) temperature of the air and materials during, and for 48 hours subsequent to, cleaning.

2. Perform cleaning and rinsing of the exterior only during daylight hours.

3.2 PROTECTION DURING USE OF HEAT-GENERATING EQUIPMENT

A. Comply with the following procedures while performing work with heat-generating equipment, including welding, cutting, soldering, brazing, paint removal with heat, and other operations where open flames or implements utilizing heat are used:

1. Obtain Owner's approval for operations involving use of open-flame or welding equipment.

a. Notification shall be given for each occurrence and location of work with heat-generating equipment.

2. As far as practical, use heat-generating equipment in shop areas or outside the building.
3. Before work with heat-generating equipment commences, furnish personnel to serve as a fire watch (or watches) for location(s) where work is to be performed.
4. Do not perform work with heat-generating equipment in or near rooms or in areas where flammable liquids or explosive vapors are present or thought to be present. Use a combustible gas indicator test to ensure that the area is safe.
5. Remove and keep the area free of combustibles, including, rubbish, paper, waste, etc., within area of operations.

a. If combustible material cannot be removed, provide fireproof blankets to cover such materials.

6. Where possible, furnish and use baffles of metal or gypsum board to prevent the spraying of sparks or hot slag into surrounding combustible material.
7. Prevent the extension of sparks and particles of hot metal through open windows, doors, holes, and cracks in floors, walls, ceilings, roofs, and other openings.
8. Do not use heat for paint removal.
9. Do not use heat for surface operations where there is flammable material hidden below the surface.
10. Inspect each location of the day's work not sooner than 30 minutes after completion of operations to detect hidden or smoldering fires and to ensure that proper housekeeping is maintained.

3.3 HISTORIC TREATMENT PROCEDURES

A. The principal aim of preservation work is to halt the process of deterioration and stabilize the item's condition, unless otherwise indicated. Repair is required where specifically indicated. The following procedures shall be followed:

1. Retain as much existing material as possible; repair and consolidate rather than replace.

2. Use additional material or structure to reinforce, strengthen, prop, tie, and support existing material or structure.
3. Use reversible processes wherever possible.
4. Use traditional replacement materials and techniques. New work shall be distinguishable to the trained eye, on close inspection, from old work.
5. Record the work before the procedure with preconstruction photos and during the work with periodic construction photos. Photographic documentation is specified in Division 1 Section "Construction Progress Documentation."

B. Prohibit smoking by personnel performing work on or near historic structures.

C. Obtain Architect's review and written approval in the form of a Constructive Change Directive or Supplemental Instruction before making changes or additions to construction or removing historic materials.

D. Notify Architect of visible changes in the integrity of material or components whether due to environmental causes including biological attack, UV degradation, freezing, or thawing; or due to structural defects including cracks, movement, or distortion.

1. Do not proceed with the work in question until directed by Architect.

E. Where Work requires existing features to be removed, cleaned, and reused, perform these operations without damage to the material itself, to adjacent materials, or to the substrate.

F. Identify new or replacement materials and features with inconspicuous, permanent marks to distinguish them from original materials. Record the legend of identification marks and the locations of these marks on Record Drawings.

G. When cleaning, match samples of existing materials that have been cleaned and identified for acceptable cleaning levels. Avoid over cleaning to prevent damage to existing materials during cleaning.

END OF SECTION 01 35 28

PROTECTION OF HISTORIC FEATURES

1.1 SUMMARY

A. Includes (but is not necessarily limited to):

1. Protection from damage due to construction activities of all historic features to remain.
2. Cataloguing, removal, and storage of all historic features indicated or as required to accommodate new construction.

1.2 REFERENCES

A. "May Co. Salvage Plan," Paratus Group with Historic Resources Group, February 26, 2015.

B. NFPA 241. Safeguarding Building Construction and Demolition Operations, National Fire Protection Agency, Quincy, MA.

1.3 DEFINITIONS

A. "Historic features" are defined as those materials, finishes, components and areas identified as significant in the Environmental Impact Report (EIR), and in this case, are indicated to remain in place, or to be removed and salvaged as part of the work.

B. "Salvage features" are defined as any historic feature to be removed from the existing construction and to be retained, repaired and/or modified for potential reuse.

C. "Off-site facility" is defined as any storage facility to be provided by the contractor or any subcontractor for storage of salvage features.

D. "Primary path of construction travel" is defined as those areas that will require a high level of protection.

E. "Secondary path of construction travel" is defined as those areas required for access to construction procedures.

F. "Artifact log" is defined as the log form supplied by the contractor and approved the Architect for cataloguing of salvage features.

1.4 QUALITY ASSURANCE

A. Contractor qualifications: All historic rehabilitation and restoration work shall be performed by skilled contractors having not less than 5 years satisfactory experience in comparable protection, salvage, and removal operations including work on at least 2 projects similar in scope and scale to this project. Provide prequalification documents for review and approval.

B. Contractor shall recognize the value and significance of the May Company Wilshire building and exercise special care during the work to ensure that existing details, materials, and finishes which are to remain are not damaged by the work being performed. This is a historic preservation project; damage is to be prevented. Replacement is not an equivalent treatment.

C. Contractor shall be responsible for protection of all existing materials and components to remain in place or be salvaged throughout the duration of construction. Extent of protection is to cover all historic features to remain that are in the vicinity of construction activities, or may be harmed by the movement of materials through the project site, whether specifically called out on the drawings, or not. All questionable protection requirements should be identified for Architect's review. In the event of damage, such items shall be repaired or replaced by the contractor at his expense, to the satisfaction of the Architect and Owner.

D. The contractor responsible for the repair or rehabilitation of salvaged features shall also be responsible for the cataloguing, disassembly, storage, and reinstallation of features.

E. Protection is to be secured adequately so as to maintain a safe environment for workers throughout the duration of the project.

1.5 SUBMITTALS

A. Submit contractor qualifications as listed in Quality Assurance section above.

B. Work Description: Submit work description detailing proposed methods and operations for cataloguing, removal of features, and transportation of items to off-site storage; protection of features in storage; and protection of features to remain on site.

C. Artifact Log: Submit sample artifact log prior to commencement of the work. Submit completed artifact log at the completion of feature removal from the site, and periodically as the work progresses.

D. Off-site Storage Facilities: Submit detailed description of building and/or other areas proposed for storage of removed historic features. Include location, size, physical attributes, security techniques and procedures, and other pertinent information relating to the storage of salvaged features.

E. Shop Drawings: Submit complete set of shop drawings recording on elevations or plans the location, configuration, and description of all features removed for salvage that will require reconstruction in its original location. Include location of features, joint locations, size, spacing, surface-mounted features, materials, conditions and all dimensions so that feature can be reconstructed in its entirety. Minimum scale ¼" = 1'-0". Existing construction drawings may be used as base sheets for shop drawings.

1.6 SITE CONDITIONS

A. Coordinate the performance of work of this section with related or adjacent work. Removal and protection of items shall be completed prior to commencement of demolition or new construction activities in each area. At a minimum, install protection in its entirety for a given feature or area prior to commencement of any demolition activities.

B. At the end of each work day, or during inclement weather, cover work exposed to weather with waterproof coverings, securely anchored.

C. Protection of historic features shall remain in place for the duration of the entire project, unless determined otherwise by the Owner.

PART 2 – PRODUCTS

1

2

2.1 SALVAGE

A. Carefully catalogue, label, disassemble, transport and store salvage features using submitted and approved methods.

2.2 PROTECTION MATERIALS

A. Polyethylene sheets: 4 mil. (general protection purposes)

B. Lumber: Species to be selected by contractor, sizes to fit field conditions. All lumber to be fire retardant. Lumber shall not be in direct contact with an historic feature.

C. Plywood: ½ inch, ¾ inch, or 1 inch, fire retardant as required. For "hard" protection at selected features; shall not be in direct contact with an historic feature.

D. Soft fiberboard: Homasote Company, Box 7240, West Trenton, NJ 08628.

1. ½ inch Homasote 440.

2. ½ inch Homasote NCFR for applications requiring fire ratings.

E. Neoprene: ¼ inch or ½ inch strips, stock lengths.

F. Polyurethane foam sheets: 2 inches and 4 inches thick, as required, and flexible wraps, as required.

G. Papers: Brown paper: Kraft paper; permeable wrap: "Tyvek."

H. Preservation tape: 3M Scotch brand, number 4811.

I. Accessories: Fasteners, nails, screws, bolts, anchors or other devices required to complete installation, sizes as required, but shall not be in direct contact with an historic feature.

2.3 OFF-SITE FACILITY REQUIREMENTS

A. Size: Furnish off-site facility of sufficient size and capacity to store and retrieve salvage features. More than one facility can be provided as long as all physical requirements listed below are met at each facility.

B. Physical Requirements:

1. Adequate floor loading capacity to support salvage features.
2. Covered loading and unloading area to allow for transport of features without exposure to inclement weather conditions.
3. Temperature and humidity: Maintain ambient temperature from a minimum of 45 degrees F to a maximum of 100 degrees F. Maintain relative humidity between 20 percent and 80 percent. Climate control is not required if these conditions can be met. Configure space to allow for adequate ventilation of stored features. Provide mechanical devices to circulate air if natural ventilation is inadequate.
4. Artificial light: Provide adequate artificial light to allow for proper handling of features and for potential examination of features while being stored.
5. Sunlight: Provide adequate protection from sunlight to prevent ultraviolet damage to stored features.
6. Water protection: Protect stored features and packing materials from exposure to water, water vapor or high humidity.
7. Vermin control: Protect all stored features from vermin and pests.

8. Fire protection: Storage space must have a functioning smoke alarm. Contractor may be required to have a fire detection and notification system in place, depending on the space and the number and value of features being stored.

C. Security: Facility must be bonded with sufficient bonding capacity to suitable replicate and replace all features stored within the space.

PART 3- EXECUTION

1.

2.

3.1 GENERAL

A. Historic features to remain in situ:

1. Install protection in its entirety before commencement of demolition or other work that may harm historic feature.
2. Protect all historic features to remain in place during construction that may be damaged by construction activities. In the event of new damage, contractor is to notify the Architect and Owner immediately as to the nature and extent of damage and the proposed method for repair. Contractor shall be responsible for repairs and replacement of newly damaged items to the satisfaction of the Architect and Owner, at no additional cost to the Owner. Be aware that the inherent value of an historic original feature is higher than the value of a modern replica of that feature.
3. Do not attach protection materials directly to historic features.
4. Secure protection adequately so as to maintain a safe environment for workers and other individuals using the site throughout the duration of the project.

B. Features to be removed for salvage or repair:

1. Catalogue, label, disassemble, transport and store historic features which have been identified for removal. Contractor is responsible for handling, transporting and storage of the items in the storage facility.
2. Catalogue all salvage features that have been removed on an artifact log. At a minimum, document feature type, unique number, size, configuration, quantity, condition, original location, disposition, and location in storage.
3. Store all salvage features in a neat, orderly fashion to allow for access and retrieval. Store like type features together in groups. Store particularly fragile features in a manner to prevent damage while in storage.

3.2 PREPARATION

A. Remove all debris and impediments to allow for full access as required to perform protection of historic features, and for demolition and construction. Protect all historic features from damage during the removal procedures as specified.

B. Verify condition of the off-site facility to ensure that there is adequate capacity and access to store and retrieve salvage features.

C. Transport items to the off-site facility as often as necessary to avoid stockpiling items on site.

3.3 INSTALLATION OF PROTECTION

A. Alternative methods to specified protection may be acceptable if equal or greater protection is provided. Submit alternate methods to Architect and Owner for review and approval. Do not proceed with alternate methods until approvals are secured.

B. Protection shall be required to remain in place for the duration of the Project. Install materials to provide protection throughout the duration of the Project. Protection may have to be removed during the project for access to protected features, etc. If protection is temporarily removed, reinstall after work is complete and maintain protection throughout the duration of the project, including repair and replacement due to wear and tear.

C. Extent of protection covers all historic features that will remain during construction, whether specifically called out on the drawings or not. Temporary protection may be required in areas to perform specific work activities.

D. All protection assemblies shall be self-supporting and self-bracing.

3.4 REMOVAL OF SALVAGE FEATURES

A. General:

1. Exercise extreme care in removing features for salvage and materials attached to historic features that are to remain.
2. Unbolt bolted connections; leave any embedded connector undisturbed and in place.
3. Unscrew screwed connections; leave embedded connector undisturbed and in place.
4. Do not pry apart members whose finish will be damaged by chipping, crazing or cracking, or whose structural integrity will be compromised.

5. Remove all nails from wood features from the backside. Drive nails through or pull from the back so that the head does not splinter the finish face.
6. Remove items whole whenever possible. Where cuts are required, make cuts cleanly and with the proper tool at logical break points.

B. Light Fixtures: Remove light fixtures in whole units. Protect existing wiring if wiring will be reused. Wrap with Tyvek, pad with foam, and package in large corrugated cardboard moving boxes, or custom fabricated plywood crates.

3.5 CATALOGUING OF SALVAGE FEATURES

A. General: Label features in a manner to permit identification of object and its original location and configuration. Contractor to submit proposed method for labeling and cataloguing salvage features.

B. Numbering and Cataloguing: Each item removed for salvage or repair shall be given a unique catalog number which is to be marked on the feature in a permanent medium (i.e., permanent marker, inscription, or attached metal tag), and listed on the artifact log. Label the features on the backside or in another obscure location. Contractor to submit proposed artifact log.

3.6 STORAGE

A. Transport items to off-site storage facility. Store features in the same orientation as they are installed on site.

B. Organize features so that they are readily retrievable. Store like features together. All packaging and all features shall be labeled and keyed to a location plan.

3.7 REINSTALLATION

A. Reinstall features removed for rehabilitation in their original location unless otherwise noted.

B. Contractor is responsible for proper inventorying and distribution to appropriate subcontractors of salvaged material for reinstallation. Chain of custody from removal to storage to reinstallation shall be noted and signed by responsible construction staff for each item.

END OF SECTION

REVISIONS

DATE/DELTA	REMARKS

417 S HILL STREET
HISTORIC REHABILITATION
417 SOUTH HILL STREET
LOS ANGELES, CALIFORNIA

BICKEL GROUP ARCHITECTURE
BICKEL GROUP INCORPORATED
3600 BIRCH STREET, SUITE 120
NEWPORT BEACH, CA 92660
P: 949.757.0411 F: 949.757.0511
www.bickelgrp.com

The plans, ideas, arrangements and designs indicated or represented by this drawing are owned by, and are the property of BICKEL GROUP, and were created and developed solely for use on, and in connection with the specific project, and shall not be used, in whole or in part, for any purpose for which they were not originally intended without written permission from BICKEL GROUP © 2021

SHEET TITLE:

Standard For Rehabilitation

SUB DATE	06/07/2022
BID DATE	
DATE:	05/23/2022
DRAWN BY:	TA
JOB NO:	21051
CHECKED BY:	EM

SHEET NUMBER:

A–0.2A

Methods Of Cleaning Dirt On Marble

Procedure code:
445506S
Source:
Tacoma Union Station Courthouse/Tacoma, Wa - Gsa/Pbs
Division:
Masonry
Section:
Marble
Last Modified:
06/28/2017

PART 1---GENERAL

1.01 SUMMARY

A. This procedure includes guidance on cleaning honed and polished marble surfaces by machine buffing or using liquid cleaners or mild detergents.

B. Safety Precautions: When working with chemicals, workersshould wear protective clothing including goggles, face shields, gloves, etc. in compliance with governing federal safety codes and regulations.

C. See 01100-07-S for general project guidelines to be reviewed along with this procedure. These guidelines cover the following sections:

1. Safety Precautions
2. Historic Structures Precautions
3. Submittals
4. Quality Assurance
5. Delivery, Storage and Handling
6. Project/Site Conditions
7. Sequencing and Scheduling
8. General Protection (Surface and Surrounding)

These guidelines should be reviewed prior to performing this procedure and should be followed, when applicable, along with recommendations from the Regional Historic Preservation Officer (RHPO).

1.02 QUALITY ASSURANCE

A. Mock-Ups: Prior to start of general marble cleaning, prepare the following sample panels on building where directed by RHPO. Obtain RHPO's acceptance of visual qualities before proceeding with the work. Retain acceptable panels in undisturbed condition, suitably marked, during cleaning as a standard for judging completed work.

1. Demonstrate materials and methods to be used for each type of cleaning and resurfacing for each type of marble surface and condition on sample panels of approximately 10 sq. ft. in area.
2. Have manufacturer's representative present when the sample work is being done and when the sample work is being inspected for approval.
3. Test adjacent non-marble materials for possible reaction with cleaning materials.
4. Allow waiting period not less than 7 calendar days after completion of sample cleaning to permit study of sample panels for negative reactions.

PART 2---PRODUCTS

2.01 MANUFACTURERS

A. BASF-Wyandotte Corporation Chemical Specialties Division 1609 Biddle Wyandotte, MI 48192 313/246-6100

B. ProSoCo, Inc. 755 Minnesota Avenue P.O. Box 1578 Kansas City, KS 66117 800/255-4255 or 913/281-2700

C. Eastern Marble Supply Company P.O. Box 392 Scotch Plains, NJ 07076 908/789-6400

2.02 MATERIALS

A. Liquid Marble Cleaner: A water-soluble non-acidic chemical cleaner manufactured specifically for restorative type cleaning of polished and honed marble surfaces. Cleaner shall contain no abrasives, grease, lye, or other caustic or corrosive ingredients, such as "Sure Klean Liquid Marble Cleaner" (ProSoCo, Inc.) or approved equal.

-OR-

Cleaning Detergent: A mildly alkaline phosphorous-free biodegradable liquid soap.

-OR-

Household ammonia and distilled water

B. Cleaning Compound for Buffing a Honed Finish: An abrasive cleaning compound, containing no caustic or harsh fillers, manufactured specifically for restorative type cleaning of honed marble surfaces such as "Wyandotte Detergent" (BASF-Wyandotte Corporation) or approved equal.

-OR-

Polishing Agent for Buffing a Polished Finish: A finely ground buffing powder manufactured specifically for restorative type polishing of polished marble surfaces, such as "Marbalite #52" (Eastern Marble Supply Company) or approved equal.

C. Clean, potable water

2.03 EQUIPMENT

A. Buffing pads for Polished Finish: Fiber brush pads manufactured specifically for restorative type polishing of polished marble surfaces

-OR-

Buffing Pads for Honed Finish: Synthetic pads manufactured specifically for restorative type cleaning of honed marble surfaces

B. Soft natural bristle brushes (DO NOT USE WIRE BRUSHES OR STEEL WOOL)

C. Circular buffing machine (for floors)

-OR-

Hand-held buffing machine (for surfaces other than floors)

D. Mop and bucket (non-metallic)

E. Sponges

F. Clean, dry cloths

PART 3---EXECUTION

3.01 PREPARATION

A. Protection: Prevent chemical cleaning and stain removal solutions from coming into contact with other surfaces which could be damaged by such contact.

B. Surface Preparation:

1. Prior to cleaning, remove cellophane tape, masking tape, etc. from surface.

3.02 ERECTION, INSTALLATION, APPLICATION

NOTE: Perform each cleaning method indicated in a manner which results in uniform coverage of all surfaces, including corners, moldings, intersices and which produces an even effect without streaking or damage to marble surfaces. CLEAN TO ACHIEVE A DESIRED (NOT NEW) APPEARANCE.

A. Cleaning Honed Marble:

1. Machine buff with a cleaning compound (see Materials, Section 2.02 B. above):
   1. Thoroughly wet honed marble surface with hot water.
   2. Sprinkle cleaning compound onto surface.
   3. Buff surfaces using a large circular buffing machine with a synthetic pad for floors or a hand-held machine for other surfaces to lift dirt build-up.
   4. Treat edges and corners of surfaces not accessible with the hand-held machine.
   5. Thoroughly rinse surfaces with clean, clear water to remove loosened dirt and standing water. Change rinse water frequently and repeat rinsing as required to completely remove water and dirt residue from surface.
   6. Repeat process as to achieve the desired appearance.
   7. Dry surfaces with clean, dry cloths or dry mop floors after rinsing to prevent streaking.
      -OR-
2. Follow procedures in Section C. below.

B. Cleaning Polished Marble:

1. Machine buff with a polishing agent (see Materials, Section 2.02 B. above):
   a. Mix polishing agent with water to create a paste compound as recommended by manufacturer.
   b. Apply paste mixture to surface and buff using a hand-held machine with a fiber brush buffing pad. Treat areas of approximately 9 sq. ft. at a time, first running the pad horizontaly and then vertically across surface.
   c. Repeat process as necessary to achieve the desired appearance.
   d. Final polish by first wetting with clean water followed by running a clean buffing pad across the surface until dry.
      -OR-

GSA

1. Apply a liquid marble cleaner to the surface (see Materials, Section 2.02 A. above):
   1. Apply cleaner to honed or polished marble surface using a stiff bristle brush.
   2. Allow cleaner to remain on surface for period recommended by chemical cleaner manufacturer taking care not to allow cleaning material to dry.
   3. Sponge rinse surface thoroughly using clean, clear water to completely remove dirt and cleaner residue. Change rinse water frequently.
   4. Repeat process as necessary to achieve the desired level of cleanliness.
   5. Wipe the surface with a clean, dry cloth to prevent streaking.

   -OR-
2. Apply a mild detergent solution to the surface (see Materials, Section 2.02 A. above):
   1. Mix mild detergent with warm water to create cleaning solution -OR- mix 1 ounce soft soap, 1 quart warm distilled water and 1 ounce household ammonia.
   2. Thoroughly wet the honed or polished marble surface with hot water.
   3. Apply cleaning solution with a cloth, sponge or soft-fibered brush. Wash in small overlapping areas.
   4. Sponge rinse surface thoroughly using clean, clear water to completely remove dirt and cleaner residue. Change rinse water frequently.
   5. Wipe the surface dry with clean, soft cloths to prevent streaking.

Stripping Built-Up Floor Coatings From Marble

Procedure code:
445519S
Source:
National Capitol Region Specifications
Division:
Masonry
Section:
Marble
Last Modified:
02/24/2012

PART 1---GENERAL

1.01 SUMMARY

A. This procedure includes guidance on stripping built-upcoatings from marble surfaces. These may include floor coatings splashed onto adjacent marble surfaces.
B. See 01100-07-S for general project guidelines to be reviewed along with this procedure. These guidelines cover the following sections:

1. Safety Precautions
2. Historic Structures Precautions
3. Submittals
4. Quality Assurance
5. Delivery, Storage and Handling
6. Project/Site Conditions
7. Sequencing and Scheduling
8. General Protection (Surface and Surrounding)

These guidelines should be reviewed prior to performing this procedure and should be followed, when applicable,along with recommendations from the Regional Historic Preservation Officer (RHPO).

1.02 SYSTEM DESCRIPTION

A. Performance Requirements: The objectives for marble cleaning are to remove dirt, grime and coatings from the surfaces without damaging the underlying material and to give all the marble a clean uniform appearance without blotches.

1.03 SUBMITTALS

a. Samples:
   1. Sample panels for cleaning and patching shall be prepared for approval and shall establish a standard for all marble work. The locations and types of control samples are to be indicated on a plan, with a photograph of each control sample to be submitted to the Contracting Officer's representative. No work shall commence until written approval for the control samples has been obtained from the Contracting Officer's representative.
   2. The Contractor shall clean sample panels 2'-0" by 2'-0" in area, on each color and type of marble,for approval by the Contracting Officer's representative. Locations of sample panels to be selected by the Contracting Officer's representative.

1.04 QUALITY ASSURANCE

A. Regulatory Requirements:
   1. Comply with municipal and Federal regulations governing all work included in this section and including, but not limited to, cleaning, waste disposal and protection to adjacent properties.
   2. Contractor: The work shall be performed by a firm possessing a minimum of five (5) years of specialized experience in the restoration and clearing of historic architectural marble, similar to that which is required in this project. The Contractor shall submit to the Contracting Officer's representative references of previous work, justifying the firm's experience. The Contacting Officer's representative reserves the right to approve or disapprove the use of the Contractor contingent upon their experience.
      a. NOTE: The quality of the work is highly dependent on the competence of the Contractor because it is not possible to anticipate every variation encountered in the surfaces, job conditions and methods used.

PART 2---PRODUCTS

2.01 MANUFACTURERS

A. ProSoCo, Inc.755 Minnesota AvenueP.O. Box 1578 Kansas City, KS 66117800/255-4255 or 913/281-2700
B. Eastern Marble Supply Company

2.02 MATERIALS

A. Water: Potable, non-staining and free of oils, acids,alkalis and organic matter.
B. Polishing Compound - An acid-free abrasive compound containing no caustic or harsh fillers or ingredients with natural resins added, manufactured specifically for polishing interior marble surfaces, such as "RS2B" (Eastern Marble Supply Company), or approved equal.
C. Cleaning Agents -(General Cleaning): A poultice incorporating surfactants and biodegradable detergents in dry form for the removal of general staining.Commercially available. The poultice is mixed with water and an additive containing special deter gents and wetting agents, such as "Sure Klean Marble Poultice", "Sure Klean Marble Poultice Additive" (ProSoCo, Inc.), or approved equal.
D. Cleaning Agents -(Built-Up Coatings): a non-acidic gel-like application for removal of built-up stains using thixotropic alkali materials with a pH value between 7 and 10, such as "Sure Klean Liquid Marble Cleaner", "Sure Klean T-942 Limestone Cleaner" (ProSoCo Inc.), or approved equal.

2.03 EQUIPMENT

A. Stainless steel trowel
B. Wood scrapers
C. Stiff bristle brushes (non-ferrous bristle)

PART 3---EXECUTION

3.01 PREPARATION

A. Protection:
   1. Take all necessary precautions and measures to protect all surrounding materials from damage that might be incurred during the marble restoration work. Any damage caused by the Contractor to other materials is unacceptable and shall be repaired or replaced by the Contractor to the satisfaction of the Contracting Officer's representative, at not cost to the Government.

GSA

3.02 ERECTION, INSTALLATION, APPLICATION

A. Cleaning Existing Built-Up Coating from Marble:
   1. Strip built-up splashed floor coatings from the lower part of marble veneer walls by applying thixotropic alkali materials to the stone ("Sure Klean Liquid Marble Clean er", and low pressure cold water rinsing (less than 100 psi). Brush apply the materials undiluted and let dwell for 20 to 60 minutes depending on field test trials. Do not allow cleaners to dry. The Contractor should clean one whole panel at a time, so as to maintain a uniform result on each panel and prevent cleaning overlap.
   2. Before rinsing, scrub for 5 to 10 minutes with bristle brushes to loosen tenacious coatings. Do not use metal brushes. Repeat application for stubborn build up. Do not allow cleaners to come in contact with the adjacent materials.
B. General Cleaning of Marble: Remove soiling and stains from marble veneer using a poultice incorporating surfaces and detergents.
   1. Prepare the poultice by mixing the additive with the *dry* poultice (fuller's earth) to the consistency of thick cream and apply a AC" thick layer to the pre-wet masonry using a stainless steel trowel or a non-ferrous implement.
   2. Cover the poultice with a membrane and allow to dry for 8 to 24 hours depending on field test trials.
   3. Scrape poultice from the masonry with a non-metallic implement and scrub with water and a fiber bristle brush.
   4. Rinse with low pressure water to remove all traces of the poulticing materials. The removal of crusted splashed coatings should precede general poultice cleaning in order to achieve a uniform result.

Dutchman Repair Of Marble

Procedure code:
445522S
Source:
National Capitol Region Specifications
Division:
Masonry
Section:
Marble
Last Modified:
02/24/2017

PART 1---GENERAL

1.01 SUMMARY

A. This procedure includes guidance on repairing severely cracked marble blocks using cutchman repair. This procedure is also appropriate for large spills in marble.
B. For guidance on making other marble repairs, see 04455- 03-R, 04455-04-R, 04455-05-R, 04455-08-R, 04455-20-R and 04455-21-R.
C. See 01100-07-S for general project guidelines to be reviewed along with this procedure. These guidelines cover the following sections:

1. Safety Precautions
2. Historic Structures Precautions
3. Submittals
4. Quality Assurance
5. Delivery, Storage and Handling
6. Project/Site Conditions
7. Sequencing and Scheduling
8. General Protection (Surface and Surrounding)

These guidelines should be reviewed prior to performing this procedure and should be followed, when applicable, along with recommendations from the Regional Historic Preservation Officer (RHPO).

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM) www.astm.org

1.03 SUBMITTALS

A. Product Data: Submit manufacturer's product data for epoxy adhesives or resins, including mixing instructions and precautionary handling instructions.
B. Samples: Submit samples of marble dutchman units. Include full range of colors and textures required to match existing stone. Submit samples of stainless steel pins for patching.

1.04 QUALITY ASSURANCE

A. Qualifications:
   1. Contractor performing the work shall have a minimum of 5 years experience in masonry restoration work of the type described for this project.
   2. If requested by the Owner, furnish a statement of the experience and qualifications of the firm and of the key personnel who will work on this project. Include the names and addresses of successful projects completed, and for each, the name and address of the owner and the architect.

1.05 DELIVERY, STORAGE AND HANDLING

A. Packing and Shipping: Deliver stone materials to the project site in undamaged condition.
B. Storeage and Protection:
   1. Store and handle stone to prevent their deterioration or damage due to moisture, extreme temperature changes, contaminants, breakage, chipping or other causes.
   2. Do not use pinch or wrecking bars to move or place stone. Lift stone with wide belt slings where possible. Use wood rollers to move stone laterally.

1.06 PROJECT/SITE CONDITIONS

A. Environmental Requirements: The work is to be executed only when the air and surface temperature is 40 F and rising, or less than 90 F. No pointing or patching is to be executed when the temperature is 45 F and falling, or when freezing temperatures are expected within 48 hours.

PART 2---PRODUCTS

2.01 MANUFACTURERS

A. Jahn Restoration Mortars www.cathedralstone.com
B. Sika Corporation usa.sika.com

2.02 MATERIALS

A. Marble for replacement marble pieces and dutchman repairs to match existing marble type, color and finish, complying with ASTM C503. Size of replacements and dutchman pieces shall be as required by field conditions.
B. Reinforcement/Anchors: Stainless steel type 302/304 3/8" in diameter threaded rods, length as required.
C. Cementitious patching material such as "M70 Stone Restoration Mortar" (Jahn Restoration), or approved equal.
D. Epoxy grout: High-modulus, low viscosity, high strength epoxy grouting/sealing/binder adhesive such as "Sikadur 35, Hi-Mod LV" (Sika Corporation), or approved equal.
E. Clean, soft cloths
F. Clean, potable water

2.03 EQUIPMENT

A. Stiff fiber bristle brushes
B. Stiff wire bristle brushes
C. Chisel
D. Hammer
E. Trowel
F. Spray bottle
G. Masonry drill

PART 3---EXECUTION

3.01 PREPARATION

GSA

3.02 ERECTION, INSTALLATION, APPLICATION

A. Carefully remove loose stone fragments. Reuse all pieces of spalled stone which are in sound condition without serious cracks or flaws.
B. Clean any exposed metal anchors of all corrosion by scraping and brushing with a stiff wire bristle brush. Replace any unsound anchors as necessary with new stainless steel anchors of approximate size and shape to match existing. Bed new anchors in epoxy grout.
C. For resecurring small fragments, see 04455-21-R for guidance.
D. For larger fragments, square off the portion of spalled stone for replacement with dutchman repair. Remove dust and debris from cavity and fragments using a stiff fiber bristle brush.
E. Fit the dutchman for size.
F. For dutchman larger than 4" by 4" by 1", additional reinforcement may be required.
   1. Drill holes (size determined by size of reinforcement selected) into both the sound stone and the dutchman.
   2. Inject adhesive into the holes and set stainless steel pins into the holes.
G. Coat abutting surfaces of the stone with epoxy adhesive, and secure the stone dutchman in place until the adhesive is cured.
H. Clean any residual adhesive from the edges using a clean soft cloth. Wet the stone with clean, potable water and fill any chipped areas and edges with patching mortar. Avoid feather-edging. Tool surface level with surrounding stone. Keep mortar damp (80%-90% RH) for 72 hours or until cured.

Epoxy Patching Small Cracks and Holes in Marble

Procedure code:
445503S
Source:
Tacoma Union Station Courthouse, Tacoma, WA, GSA/PBS
Division:
Masonry
Section:
Marble
Last Modified:
08/17/2016

PART 1---GENERAL
1.01 SUMMARY

A. This specification provides guidance on patching small cracks and holes in marble with a two-component epoxy resin.

B. This specification is appropriate for cracks smaller in width than 1/8" and for holes smaller in diameter than 2".

C. Small cracks and holes in marble or other stone may be caused by impact damage, natural flaws in the stone or work on the stone. A common cause of holes and cracks is the attachment of fixtures and signage to walls. The later removal of such attachments leaves unsightly anchor holes which should be plugged or patched.

D. Read "General Project Guidelines" along with this specification. These guidelines should be reviewed prior to performing this procedure and should be followed, when applicable, along with recommendations from the Regional Historic Preservation Officer (RHPO). The guidelines cover the following sections:

1. Safety Precautions
2. Historic Structures Precautions
3. Submittals
4. Quality Assurance
5. Delivery, Storage and Handling
6. Project/Site Conditions
7. Sequencing and Scheduling
8. General Protection (Surface and Surrounding)

PART 2---PRODUCTS
2.01 MATERIALS

A. Patching Resin:
   1. Manufacturer's standard 2-component epoxy resin, designed specifically for patching or bonding of marble units.
   2. Factors to consider when selecting an epoxy should include:
      a. Permeability
      b. Absorption
      c. Thermal expansion coefficients
      d. Ultraviolet lighting conditions

B. Aggregate for Epoxy: Ground marble dust to match color of existing marble

C. Clean, potable water

2.02 EQUIPMENT

A. Hacksaw Blade

B. Chisels

C. Hand-held Water Bottle

D. Steel Trowel

E. Caulking gun

F. Stiff bristle brushes (non-metallic)

G. Resurfacing Screens for Honed Finish: A fine grit screen manufactured specifically for restorative type cleaning and resurfacing of honed marble surfaces.

H. Grinding Stones for Honed Finish: Fine grit emery stones manufactured specifically for restorative type grinding and resurfacing of honed marble surfaces.

I. Soft, nylon bristle brushes

GSA

NOTE: THIS PROCEDURE IS APPROPRIATE FOR CRACKS SMALLER IN WIDTH THAN 1/8" AND FOR HOLES SMALLER IN DIAMETER THAN 2". THE MAXIMUM SIZE OF THE REPAIR SHOULD BE ADJUSTED ACCORDING TO THE TYPE OF MARBLE AND THE PROPOSED APPEARANCE.

A. Using a chisel or hacksaw blade, carefully remove unsound marble material and old patching material from cracks and holes to expose sound marble material for contact with epoxy patch.

B. Brush, vacuum or flush cracks and holes to remove dirt and loose debris.

C. Mix 2-component epoxy resin with marble dust aggregate to create a paste with a consistency suitable for application (based on RHPO approval). Use marble dust from stone pieces of the same type, color, etc.

D. Using a caulking gun or spatula, apply patching material in cracks and holes as recommended by manufacturer to conform to adjacent marble surfaces.

E. Allow patching material to cure for period recommended by manufacturer.

F. Once patching material has hardened, grind and polish surface of patching material to march surface characteristics of adjacent marble.

REVISIONS

DATE/DELTA	REMARKS

417 S HILL STREET
HISTORIC REHABILITATION
417 SOUTH HILL STREET
LOS ANGELES, CALIFORNIA

BICKEL GROUP ARCHITECTURE
BICKEL GROUP INCORPORATED
3600 BIRCH STREET, SUITE 120
NEWPORT BEACH, CA 92660
P: 949.757.0411 F: 949.757.0511
w w w . b i c k e l g r p . c o m

The plans, ideas, arrangements and designs indicated or represented by this drawing are owned by, and are the property of BICKEL GROUP, and were created and developed solely for use on, and in connection with this specific project, and shall not be used, in whole or in part, for any purpose whatsoever. If they were not originally intended without written permission from BICKEL GROUP. © 2021

SHEET TITLE:

Standard
For
Rehabilitation

SUB DATE	06/07/2022
BID DATE	
DATE:	05/23/2022
DRAWN BY:	TA
JOB NO:	21051
CHECKED BY:	EM

SHEET NUMBER:
A–0.2B

An official website of the United States government

Repointing Marble

Procedure code:
445320S
Source:
National Capitol Region Specifications
Division:
Masonry
Section:
Marble
Last Modified:
03/03/2017

PART 1---GENERAL

1.01 SUMMARY

A. This procedure includes guidance on raking out and repointing the deteriorated or inappropriately repointed horizontal and vertical joints on exterior marble.

B. See 01100-07-S for general project guidelines to be reviewed along with this procedure. These guidelines cover the following sections:

1. Safety Precautions
2. Historic Structures Precautions
3. Submittals
4. Quality Assurance
5. Delivery, Storage and Handling
6. Project/Site Conditions
7. Sequencing and Scheduling
8. General Protection (Surface and Surrounding)

These guidelines should be reviewed prior to performing this procedure and should be followed, when applicable, along with recommendations from the Regional Historic Preservation Officer (RHPO).

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM) www.astm.org

1.03 QUALITY ASSURANCE

A. Regulatory Requirements: Marble Design Manual, ASTM C144-70, Aggregate for Masonry mortar; ASTM C150-74 Portland Cement; manufacturer's printed recommendations for product use and installation.

B. Certifications: Prior to delivery, submit certificates attesting compliance with applicable specifications for grades, types, classes.

C. Field Samples: Prior to raking out all areas, cut back joints at location selected by the Contracting Officer using the methods specified. Raking will continue at no additional cost to the Government, until an acceptable sample is achieved. This area will serve as standard for joint raking for the entire job. It will be marked and left unpointed until all other pointing is completed. Point when directed by the Contracting Officer.

1.04 PROJECT/SITE CONDITIONS

A. Existing Conditions: No stone work will be performed when the air temperature is 40 F and falling or when stone surface temperature is 40 F or below.

PART 2---PRODUCTS

2.01 MATERIALS

A. Portland cement: Type I, ASTM C150, gray and/or white as necessary to match mortar color specified.

B. Hydrated masons lime: ASTM C207.

C. Aggregate: See ASTM C144 (ASTM 1997a). Clean sharp sand free of loam, silt, soluble salts and organic matter. Sand color should match stone color as closely as possible. Aggregate shall conform to the size gradations specified as a result of laboratory analysis of an approved sample.

1. Choose the color of the aggregate so that the dry mortar color matches specified color.

D. Water: Clean and free of deleterious amounts of oils, acids, alkalis and organic matter.

2.03 EQUIPMENT

A. Chisels

B. Joint tools

C. Hawks

D. Stiff fiber bristle brushes

E. Trowels

F. Rubber mallet

2.04 MIXES

A. Proportions for Marble Pointing, or as determined by mortar analysis:

1. Portland cement: 1 part by volume
2. Lime: 2 parts by volume
3. Aggregate: 9 parts by volume
4. Water: To form a workable consistency

B Mixing Procedures:

1. Measure materials by volume or equivalent height.
2. Do not measure by shovel. Use known measure.
3. Mix ingredients in clean mechanical batch mixer for 3-5 minutes.
4. Let mortar sit for 20 minutes prior to use to allow for initial shrinkage. Use mortar within 1 hour of initial mixing.

PART 3---EXECUTION

3.01 ERECTION, INSTALLATION, APPLICATION

A. Rake out all stone joints in designated areas by hand using a chisel no more than width of the mortar joint. Clean all mortar from surfaces within the joint or crack so that the new pointing mortar bonds to the building material, not old mortar. Do not chip or spall edges of the marble. If work is found unacceptable, all raking will cease without additional cost to the Government until deficiencies in tools, workers or methodologies have been corrected to the Contracting Officer's satisfaction.

B. Raked joint depth to be at least 3/4" but in all cases rake back to expose sound mortar. Raked joint depth should be 2 to 2 1/2 times the joint width.

C. Brush, vacuum or flush joints to remove all dirt and loose debris.

GSA

D. Fill joints with mortar using the fewest possible number of applications. Do not fill joints more than 1/2" deep in any application. Allow each application to dry (stiffen) before applying next layer. Apply successive layers only after preceding layer has taken initial set.

F. Use clean tools and equipment free from hardened or partially set mortar.

G. Clean excess mortar from stone and joints, removing splashed mortar and droppings immediately.

H. Do not retemper or use mortar which has partially set, is caked or is lumpy.

I. Finish horizontal and vertical face joints. Do not allow mortar to extend over the surface of the stone.

J. Curing: Keep joints damp (90% RH) for at least 72 hours or until surface is cured. Protect joints from rapid drying due to wind (i.e., covering tarps, enclosure on scaffolding).

3.02 ADJUSTING/CLEANING

A. At the time of repairing, pointing and resetting the marble, immediately remove mortar, grout and adhesives from the face of the masonry.

B. Use only tools and equipment which are clean and free of hardened or partially hardened material.

C. Clean marble only with fiber bristle brushes and water. Use no acids, detergents, or other cleaning agents.

An official website of the United States government

Repairing Hairline Cracks And Small Gouges In Marble

Procedure code:
445508S
Source:
National Capitol Region Specifications - State Department
Division:
Masonry
Section:
Marble
Last Modified:
02/28/2017

PART 1---GENERAL

1.01 SUMMARY

A. This procedure includes guidance on filling narrow cracks, holes and gouges in interior marble.
B. See 01100-07-S for general project guidelines to be reviewed along with this procedure. These guidelines cover the following sections:

1. Safety Precautions
2. Historic Structures Precautions
3. Submittals
4. Quality Assurance
5. Delivery, Storage and Handling
6. Project/Site Conditions
7. Sequencing and Scheduling
8. General Protection (Surface and Surrounding)

These guidelines should be reviewed prior to performing this procedure and should be followed, when applicable, along with recommendations from the Regional Historic Preservation Officer (RHPO).

PART 2---PRODUCTS

2.01 MANUFACTURERS

A. Akemi Plastics, Inc. www.akemina.com

B. Eastern Marble & Granite Supply Company www.easternmarble.com

2.02 MATERIALS

A. Polyester Filler: Knife Grade Polyester-Based Adhesive:

"Akemi Marmorkitt 1000 Platinum" (Akemi Plastic, Inc.,), or "Italian Craftsman Polyester Adhesive"(Eastern Marble & Granite Supply Company), or approved equal.

NOTE: Selected filler should NOT contain materials that may absorb into the marble and cause staining. Test in an inconspicuous area.

B. Polishing Compound: An acid-free abrasive compound containing no caustic or harsh fillers or ingredients with natural resins added, manufactured specifically for polishing interior marble surfaces, such as R52B (Eastern Marble Supply Company), or approved equal.
C. Water: Clean and free of amounts of oils, acids, alkalies, salts, organic materials, or other substances that may be deleterious to mortar or any metal in the wall.

2.02 EQUIPMENT

A. Hacksaw Blade
B. Chisels
C. Hand-held Water Bottle
D. Caulking gun
F. Stiff bristle brushes (non-metallic)

GSA

PART 3---EXECUTION

3.01 ERECTION, INSTALLATION, APPLICATION

A. Using a chisel or hacksaw blade, carefully remove unsound marble material and old patching material from cracks and holes to expose sound marble material for contact with polyester resin patch.
B. Brush, vacuum or flush cracks and holes to remove dirt and loose debris.
C. Allow to dry thoroughly.
D. Using a caulking gun or spatula, fill narrow cracks, holes, and gouges with polyester filler, colored to match adjacent marble and honed or polished to match marble finish. Tape around the work area to prevent staining of the marble during filling operation. Surfaces shall be true and level. Remove tape residue with appropriate solvent to produce the specified finish.
E. Allow patching material to cure for period recommended by manufacturer.
F. Grind marble down until an even plane is achieved. Feather out to unaffected surface as required to avoid marble having dished appearance. Use right angle water feed grinder with successively finer diamond disks (#60 to #3500) or silicon carbide grinding stones (36 to 400 grit).
G. Polish to match existing sheet of marble. Use acid-free aluminum oxide polishing compound with felt pad.

CAUTION: USE NO POLISHING COMPOUNDS CONTAINING FLUORIC ACID AS IT WILL ETCH THE MARBLE SURFACE RESULTING IN A DIMINUTION OF GLOSS.

An official website of the United States government

Repolishing Marble

Procedure code:
445502S
Source:
Outdoor Sculpture Manual - Center For Public Buildings
Division:
Masonry
Section:
Marble
Last Modified:
02/28/2017

THIS PROCEDURE APPLIES TO HIGHLY POLISHED STONE AND IS NOT SUITABLE FOR USE ON HONED MARBLE SURFACES.

PART 1---GENERAL

1.01 SUMMARY

A. This procedure includes guidance on repolishing marble using polishing powder and water.
B. Determine original finish of marble before proceeding with any repolishing procedure.
C. Repolishing reflective surfaces may be necessary after treatment if the surface gloss has been altered. This is especially true if the surface has been etched.
D. Perform as needed to repolish specular stone surfaces, particularly following etching (See 04455-15-R "Removing Etch Marks in Marble").
E. For general information on the characteristics, uses and problems associated with marble, see 04455-01-S.

PART 2---PRODUCTS

2.01 MANUFACTURERS

A. Eastern Marble & Granite Supply Company www.easternmarble.com

2.02 MATERIALS

A. Mineral water
B. Marble polishing powder: A finely ground buffing powder manufactured specifically for restorative type polishing of polished marble surfaces, such as "#52-B Polishing Powder" (Eastern Marble) or approved equal. Polishing agents may also be available at a hardware store or local stone dealer. Or a prepared commercial polishing liquid or cream such as "Italian Craftsman" (Eastern Marble), or an approved equal.
C. Clean, lint-free cloths

2.03 EQUIPMENT

A. Buffing pads for Polished Finish: Fiber brush pads manufactured specifically for restorative type polishing of polished marble surfaces
B. Hand-held buffing machine

GSA

PART 3---EXECUTION

3.01 ERECTION, INSTALLATION, APPLICATION

NOTE: Do a test of the proposed polishing treatment in an appropriate, not highly visible area, to determine appropriate approach to repolishing the marble.

A. Wet the surface with mineral water.
B. Sprinkle the marble polishing powder over the surface.
C. Dampen cloths with mineral water (if they are to be used).
D. Rub the powder onto the stone with the damp cloths or by using a hand-held buffing machine in long, even strokes; keeping clear of adjoining vertical surfaces.
NOTE: Apply polishing powder to marble surfaces to comply with manufacturer's recommendations for hand application methods, unless otherwise indicated. Do not allow to remain on surface for periods longer than that indicated or recommended by manufacturer.
E. Buff until a uniform polish, consistent with the historic design intent, is achieved. For most historic floors, the original finish is a honed (non-reflective) finish. Walls and vertical surface were often given a soft satin polish. Highly polished surfaces became more popular after World War II.
F. . Wipe clean with a damp cloth.
-OR-
G. For prepared liquid or cream polishing agents, follow the manufacturer's recommended directions.

REVISIONS

DATE/DELTA	REMARKS

417 S HILL STREET
HISTORIC REHABILITATION
417 SOUTH HILL STREET
LOS ANGELES, CALIFORNIA

BICKEL GROUP
ARCHITECTURE
BICKEL GROUP INCORPORATED
3600 BIRCH STREET, SUITE 120
NEWPORT BEACH, CA 92660
P: 949.757.0411 F: 949.757.0511
www.bickelgrp.com

LICENSED ARCHITECT
JAMES M. DUPUIS
C-20862
06-30
RENEWAL DATE
STATE OF CALIFORNIA

The plans, ideas, arrangements and designs indicated or represented by this drawing are owned by, and are the property of BICKEL GROUP, and were created and developed solely for use on, and in connection with this specific project, and shall not be used, in whole or in part, for any purpose for which they were not originally intended without written permission from BICKEL GROUP. © 2021

SHEET TITLE:

Standard
For
Rehabilitation

SUB DATE	06/07/2022
BID DATE	
DATE:	05/23/2022
DRAWN BY:	TA
JOB NO:	21051
CHECKED BY:	EM

SHEET NUMBER:

A–0.2C

An official website of the United States government

Reinforcing Loose Terra Cotta Units And Patches

Procedure code:
4214035
Source:
Us Custom House/Portland, Or - Gsa/Facilities Support Ctr
Division:
Masonry
Section:
Terra Cotta Unit Masonry
Last Modified:
08/15/2016

PREFACE: This procedure should be performed under the direction of an historical architect or engineer to determine the most efficient and least destructive manner for executing the work. Approval from the regional historic preservation officer is required.

PART 1---GENERAL

1.01 SUMMARY

A. This procedure includes guidance on installing bent wire armatures or studs in terra cotta to additionally reinforce and anchor existing patches that are more than 1/2" thick, or any patch which is approximately fist size.
B. This procedure requires substantial intervention and is only to be used to secure large patches to alreadydamaged terra cotta surfaces. If not properly anchored, large patches are particularly vulnerable to failure and separation due to weight, thermal expansion and bond failures.
C. See "General Project Guidelines" for general project guidelines to be reviewed along with this procedure. These guidelines cover the following sections:
    1. Safety Precautions
    2. Historic Structures Precautions
    3. Submittals
    4. Quality Assurance
    5. Delivery, Storage and Handling
    6. Project/Site Conditions
    7. Sequencing and Scheduling
    8. General Protection (Surface and Surrounding)
    These guidelines should be reviewed prior to performing this procedure and should be followed, when applicable, along with recommendations from the Regional Historic Preservation Officer (RHPO).

PART 2---PRODUCTS

2.01 MANUFACTURERS

A. Sika Corporation
B. Abatron, Inc.

2.02 MATERIALS

A. Stainless steel or bronze wire armature, or threaded rods and bolts. Threaded rods shall be sized according to the need and loading requirements. Consult with structural engineer and RHPO.
    1. Wire shall be 12-gauge or heavier.
    2. Stainless steel shall be AISI Type 316.
    3. The use of a wire armature or threaded rods shall be determined by size, depth and thickness of patch being stabilized. To be determined by structural engineer and RHPO.
B. Moisture insensitive, structural epoxy or polyester resin adhesive as recommended by adhesive manufacturer (Sika Corporation, Abatron, Inc., or approved equal).
C. Acrylic-cement finish.

2.03 EQUIPMENT

A. Masonry drill with diamond tipped coring bits.
B. Electric drill with mixing paddle to pre-mix epoxy adhesive.
C. Clean pail in which to mix epoxy adhesive.
D. Pressure-injection equipment as may be required.
E. Mixing nozzle: As recommended by adhesive manufacturer, the resin components may be automatically mixed by a nozzle that is secured to the component cartridges.

PART 3---EXECUTION

3.01 ERECTION, INSTALLATION, APPLICATION

A. Holes:
    1. The drill holes should be sized according to the wire or rod used. Typically, the hole shall be no greater in diameter than 1/8-inch or 1/4-inch (depending on the adhesive used) larger than the pin to be embedded, and ten to fifteen bar diameters deep.
    2. Drill shall be non-impact type rotary drill with a masonry bit.
    3. Depth of hole shall be sufficient to reach sound backing material.
    4. Space wire armature reinforcing at approximately 2-inches on center, arranged in a grid or mesh where applicable, or as recommended by structural engineer.
    5. Clean holes with high pressure air.
B. Protection: Protect surfaces around holes from contact with adhesives. Use petroleum jelly, modeling clay or polyethylene sheets as required.
C. Installation:
    1. Verify the rod length as appropriate for the depth.
    2. If using automatic pressure-injection equipment, resin shall be automatically measured and mixed in the mixing nozzle.

GSA

    4. Pack or place the resin into holes.
    5. Slowly insert the wire armature or threaded rod into the resin to the full depth of the hole. Countersink head of rods.
    6. Do not disturb the anchor until the adhesive has cured. Follow manufacturers instructions.
    7. No gaps shall be visible between the rod and the masonry.
D. Plug counter-sunk holes and build-out face of damaged patches as required flush with surrounding surfaces using patching mortar as described in HBPP procedure "Patching Small Holes, Minor Chips and Spalls in Terra Cotta".

3.02 ADJUSTING/CLEANING

A. Immediately remove spills and excess adhesive with absorbent material and flush with water.
B. Uncured material can be removed with solvent as recommended by adhesive manufacturer.
C. Do not allow excess material to cure as cured adhesive can only be removed mechanically.

3.03 PROTECTION

A. Apply one coat colored masonry acrylic-cement finish to protect and repair damaged surface areas.
B. Apply this protective, coloring, coating to existing old patch areas where the color does not match the terra cotta.

An official website of the United States government

Repairing Spalled Terra Cotta

Procedure code:
4214065
Source:
National Capitol Region Specifications - Agriculture Bldg
Division:
Masonry
Section:
Terra Cotta Unit Masonry
Last Modified:
04/17/2017

PART 1---GENERAL

1.01 SUMMARY

A. This procedure includes guidance on repairing small spalls in terra cotta using a cementitious patching mortar. For alternative guidance in repairing spalls in terra cotta using field-prepared mortar, see 04214-01-R.
B. See 01100-07-S for general project guidelines to be reviewed along with this procedure. These guidelines cover the following sections:
    1. Safety Precautions
    2. Historic Structures Precautions
    3. Submittals
    4. Quality Assurance
    5. Delivery, Storage and Handling
    6. Project/Site Conditions
    7. Sequencing and Scheduling
    8. General Protection (Surface and Surrounding)

These guidelines should be reviewed prior to performing this procedure and should be followed, when applicable, along with recommendations from the Regional Historic Preservation Officer (RHPO).

1.02 SUBMITTALS

A. Samples: Color-match patch samples fabricated on pieces of appropriate masonry from or on the building using the specified repair mortar as required.

PART 2---PRODUCTS

2.01 MANUFACTURERS

A. Jahn Restoration Mortars www.jahnmortars.com
B. Edison Coatings, Inc. www.edisoncoatings.com

2.02 MATERIALS

A. Terra Cotta Patch Mix: "Jahn M100 Terra Cotta Repair Mortar" (Jahn Restoration Mortars, Cathedral Stone Products, Inc.), "Custom System 45" (Edison Chemical Systems, Inc.), or approved equal. Prepare samples for approval. The RHPO will select the color most closely matching the existing original terra cotta.
    1. Mortar mix should be formulated to match color and texture of existing masonry.
    2. Mortar mix should not contain any synthetic additives.
    3. Mortar mix should be vapor permeable, frost and salt resistant, shrink-resistant, and be physically compatible with the substrate, including, but not limited to, porosity, tensile, and compressive +strength.
B. Water: Clean, free of oils, acids, alkalis and organic matter.

2.03 EQUIPMENT

A. Stiff, natural bristle brushes
B. Hammer
C. Chisel
D. Trowel
E. Putty knife

2.04 MIXES

A. For Jahn Restoration Mortar: Follow manufacturer's printed instructions.
B. For Custom System 45: Follow manufacturer's printed instructions.

PART 3---EXECUTION

3.01 PREPARATION

A. Protection:
    1. Protect persons, motor vehicles, surrounding surfaces of building whose masonry surfaces are being restored, building site, and surrounding buildings from injury resulting from masonry restoration work.
    2. Erect temporary protection covers over pedestrian walkways and at points of entrance and exit for persons and vehicles which must remain in operation during course of masonry restoration work.
    3. Contractor shall test those areaway drains, window well drains, etc., which will be used to assure that drains are functioning properly prior to performing masonry restoration operations in those areas. The Contractor shall report immediately to the Construction Engineer the location of drains which are found to be stopped up or blocked.
    4. Prevent grout or mortar used in repointing and repair work from staining face of surrounding masonry and other surfaces. Remove immediately grout and mortar in contact with exposed masonry and other surfaces.
    5. Protect sills, ledges, windows, and projections from repair material droppings.

3.02 ERECTION, INSTALLATION, APPLICATION

NOTE: See manufacturer's product specifications for additional requirements in making terra cotta patches.

A. Remove loose mortar and masonry at areas to be patched.

B. Cut back 1/2" to sound terra cotta with chisel and hammer. Score surface to receive patch with chisel to provide a mechanical key with patching material.
C. Thoroughly clean all loose terra cotta particles, mortar and other dust and debris from surfaces to be repaired by air and

GSA

Contracting Officer's Representative to determine the correct degree of moistening.
E. Mix the cementitious patching material according to manufacturer's instructions.
    1. The mixture should be compatible in texture and porosity to the adjacent terra cotta.
    2. Patching mortar should be shapable without using molds and as it is being applied should hold its shape right away.
    3. Do not mix more material than can be used within 30 minutes, or as recommended by manufacturer.
F. Apply mortar mix with a trowel. Apply patching mortar in layers no greater than 3". If a second layer is required, allow the mortar to cure before applying the second layer. If a cement skin forms, remove 1/16" of the surface using a metal straight edge or scraper.
G. Build up layers so that patch is slightly higher than adjacent surfaces. Do not feather edges.
H. Allow to harden for length of time as recommended by manufacturer, then carefully cut back and tool to match adjacent surfaces. Maintain mortar joints; do not install patch across joints.
I. Keep patches damp for 72 hours after installations.

3.03 ADJUSTING/CLEANING

A. After mortar has fully hardened, thoroughly clean exposed masonry surfaces of excess mortar and foreign matter using stiff nylon or bristle brushes and clean water, spray applied at low pressure.
B. Use of metal scrapers or brushes will not be permitted.
C. Use of acid or alkali cleaning agents will not be permitted.

An official website of the United States government

Patching Small Holes, Minor Chips And Spalls In Terra Cotta

Procedure code:
4214015
Source:
US Custom House/Portland, Or - Gsa/Facilities Support Ctr
Division:
Masonry
Section:
Terra Cotta Unit Masonry
Last Modified:
04/17/2017

PART 1---GENERAL

1.01 SUMMARY

A. This procedure includes guidance on patching small holes (no greater than fist size), minor chips and spalls in terra cotta with mortar to match existing units.
B. Make patch repairs only where the area and depth of damage is large enough to make a patch which is at least 1/2-inch thick; otherwise make surface finish repairs to protect from more weather damage and to maintain a uniform color and appearance. For guidance on patching masonry cracks, see 04200-03-R; for guidance on reinforcing existing patches, see 04214-03-R.
C. See 01100-07-S for general project guidelines to be reviewed along with this procedure. These guidelines cover the following sections:
    1. Safety Precautions
    2. Historic Structures Precautions
    3. Submittals
    4. Quality Assurance
    5. Delivery, Storage and Handling
    6. Project/Site Conditions
    7. Sequencing and Scheduling
    8. General Protection (Surface and Surrounding)

These guidelines should be reviewed prior to performing this procedure and should be followed, when applicable, along with recommendations from the Regional Historic Preservation Officer (RHPO).

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM) www.astm.org

1.03 SUBMITTALS

A. Patching Mortar Sample: Cured and dried sample of mortar proposed for use in masonry patching; provide with mix design and complete list of all materials and proportions with details on how mix proportions will be followed in the field; a sample area on the building may be used for this test.

1.04 PROJECT/SITE CONDITIONS

A. Environmental Requirements: When outside air temperature is below 5 degrees C (40 degrees F), maintain mortar temperature between 20 degrees C (70 degrees F) and 50 degrees C (120 degrees F) by heating water and/or aggregates.

PART 2---PRODUCTS

2.01 MANUFACTURERS

A. Thoro Consumer Products (BASF Construction Chemicals) www.thoroproducts.com

2.02 MATERIALS

A. Setting and Patching Mortar Materials: Mortar should meet standard compressive strength and permeability requirements for terra cotta. General ASTM Designation C 270-88a.
    1. Portland Cement: ASTM Designation C150-89, Type I or II. Natural light gray or buff color.
    2. Hydrated Lime: ASTM Designation C207-79, Type S or equivalent lime putty.
    3. Masons Sand: The sand used is the primary giver of the cured mortar color. Match samples provided by RHPO from original mortar materials.
    4. Mineral Colorants: Only as necessary and approved to match terra cotta matrix or surface color.
    5. Other admixtures: No accelerators (Calcium Chloride) or additives may be used unless approved by the RHPO.
B. Patching Accessories:
    1. Bonding Agents: "ThoroBond" (Thoro Consumer Products), or approved equal.
    2. Glaze Replacement Coating for Terra Cotta: Portland cement base, polymer modified, water vapor permeable, masonry coating; Thoroseal (Thoro Consumer Products) or approved equal.
        a. Color to be selected by RHPO to match existing terra cotta finish after curing.
    3. Microcrystalline wax
    4. Water-tolerant paint
C. Clean, potable water

2.03 EQUIPMENT

A. Masonry drill
B. Hacksaw blade
C. Chisels
D. Wooden mallet
E. Glass cutter
F. Wire brushes
G. Hand-held water bottle
H. Steel trowel

PART 3---EXECUTION

3.01 EXAMINATION

A. When inspecting for external damage, look for:
    1. Missing units
    2. Deteriorated or missing mortar
    3. Large cracks running through multiple units
    4. Material failures such as spalls, and parallel crazing
    5. Presence or absence of water-shedding devices like flashing, gutters and downspouts
    6. Bulges in the terra cotta, particularly at floor levels and at piers
    7. Rust stains from failing anchors
    8. Efflorescence from excessive moisture in the wall
B. When inspecting for internal damage:
    1. Strike the surface of a unit with a wooden mallet.
    2. Undamaged units give off a clear ringing sound, while broken units and those with internal damage give off a flat thud.
    3. Consistent tonal quality among similar pieces is the key to locating damaged units.

3.02 PREPARATION

A. Surface Preparation:
    1. Clean broken, spalled, and cracked terra cotta units by scraping, chipping, and wire brushing the damaged area to expose sound, clean, terra cotta surface.
    2. Wash the cleaned surface with clean, clear water or blow compressed air to remove dusts.
    3. Tool work areas to be patched to roughen for promoting bonding to patch material.
    4. Undercut edges of area to be patched (roughly 30 degrees).

3.03 ERECTION, INSTALLATION, APPLICATION

A. Using a glass cutter, cut a line through the fireskin or glaze around the damaged area at right angles to the edges of the block.
B. Using a masonry drill and a hacksaw blade, remove all damaged material.
C. Undercut at least 2 of the edges to provide a good key for the repair.
D. Mix patching mortar to a stiff consistency, to be workable, but not to run, sag, or be friable.
    1. Consistently and accurately measure materials for each batch according to approved samples.
    2. Mix for at least five minutes in a mechanical batch mixer or mortar box.
    3. Mix trowel workable consistency for urit masonry setting and resetting.
    4. Mix firm dry consistency for repointing.
    5. Discard mortar not used within two hours after mixing; do not retemper at mixer.
E. Hand-spray the surface with water before placing the mortar.

GSA

    1. Place patching mortar in maximum of 3/8-inch thick lifts, allowing an initial set, before proceeding with additional lifts, successively, until the whole patch is filled. Hand-spray the mortar with water before each application.
    2. Slightly over-fill the patch to allow for shrinkage and finishing.
        NOTE: Depth of lifts should be adjusted to type of mortar in order to allow for adequate curing.
H. Finish and dress patch surface to match adjacent surfaces, and begin curing.

An official website of the United States government

Replacing Damaged Terra Cotta Units

Procedure code:
4214045
Source:
Developed For HSPG (NPS - Southeast Regional Office)
Division:
Masonry
Section:
Terra Cotta Unit Masonry
Last Modified:
08/15/2016

PREFACE: This procedure should be performed under the direction of an historical architect or engineer to determine the most efficient and least destructive manner for executing the work. Approval from the regional historic preservation officer is required.

PART 1---GENERAL

1.01 SUMMARY

A. This procedure includes guidance on removing and replacing severely damaged ceramic veneer, both adhesion type and anchor type. Sculptural elements are not covered in this procedure.
B. See "General Project Guidelines" for general project guidelines to be reviewed along with this procedure. These guidelines cover the following sections:
    1. Safety Precautions
    2. Historic Structures Precautions
    3. Submittals
    4. Quality Assurance
    5. Delivery, Storage and Handling
    6. Project/Site Conditions
    7. Sequencing and Scheduling
    8. General Protection (Surface and Surrounding)
    These guidelines should be reviewed prior to performing this procedure and should be followed, when applicable, along with recommendations from the Regional Historic Preservation Officer (RHPO)

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM),

1.03 SUBMITTALS

A. Shop Drawings:
    1. The historical architect shall furnish all drawings, details and other information, including structural drawings, necessary for the manufacture of replacement material.
    2. Shop drawings showing details of construction and jointing of replacement material shall be submitted by the manufacturer to the contractor for approval by the RHPO before any of the material is processed. Drawings shall show sections, dimensions, and the connection with other work. (If anchored, the typical and special anchors, grooves, etc., shall be shown.)
    3. The manufacturer shall complete setting drawings, numbered and marked to correspond with numbers and other marks on the replacement pieces. These drawings shall also show all other necessary data to properly and efficiently set the material, including dimensions and sizes of joints, anchors, hangers, expansion and control or pressure-relieving joints, etc., which shall be furnished by others.

PART 2---PRODUCTS

2.01 MANUFACTURERS

A. Boston Valley Terra Cotta
B. Gladding, McBean & Co.
C. Ludowici Celadon
D. The Sherwin Williams Co.
E. Studio 5 Pottery
F. Superior Clay Corp.

2.02 MATERIALS

A. Terra Cotta Replacement Units (ceramic veneer)
    NOTE: ALL REPLACEMENT UNITS SHALL MATCH ORIGINAL IN SIZE APPEARANCE, COLOR AND FINISH.
    1. General:
        a. All materials shall be in accordance with the architect's drawings and details.
        b. All pieces shall be of even thicknessthroughout, and shall be true and even on each face.
        c. Each piece shall be thoroughly burned and free of cracks, air bubbles and other defects.
        d. All edges and details shall be crisp and sharp.
    2. Adhesion Type Ceramic Veneer: Approximately 1" thick, with ribs, grooves or dovetails on back. Individual units shall not have a surface area greater than 720 square feet.
    3. Anchored Type Ceramic Veneer: Machine or hand made, with a wall thickness of approximately 1-5/8" with dovetail ribs projecting on the back. Handmade units shall have profiles as detailed by the architect.
B. Anchoring system pieces as required - either stainlesssteel, AISI (American Iron and Steel Institute) Type 316, polyester resin, or as recommended by the ceramic veneer manufacturer.
C. Paint:
    1. "Zinc Chromate Primer" (Sherwin Williams), or approved equal.
    2. Top coat(s): Number and type of paint as recommended by manufacturer of primer. Paint shall be water tolerable and made by the same Manufacturer should be same as the primer.
D. Setting Mortar:
    1. 1 cu. ft. Portland Cement, ASTM C 150-67, Type I or Type II
    2. 1/2 cu. ft. approved high calcium slaked lime putty, screened and aged at least 20 days, containing no more than 4% magnesium oxide OR ,
    3. 1/2 cu. ft. hydrated lime, ASTM C 206 or C 207, Type S
    4. 4 cu. ft. clean, sharp siliceous sand graded from fine to very fine, ASTM C 144

    5. 1 qt. "Hydratite Liquid" or approved equal
E. Pointing Mortar:
    1. 1 vol. portland cement as above.
    2. 1/4 vol. aged high calcium lime putty as above, or
    3. 1/4 vol. hydrated lime as above.
    4. 3 vols. very fine sand as above.
    5. Gauge above with mix of one volume "Konset" thoroughly mixed in six volumes water, or of "Anti-Hydro"or "Sucoreen Red Label" or "Tricosal" or approved equal used according to manufacturer's directions.
F. Grout Mix #1: For all vertical voids back of anchor-type ceramic veneer and handmade ceramic veneer shall be wet and sloppy composed of the following:
    1. 1 vol. portland cement as above.
    2. 3 vols. clean sharp sand as above.
    3. 2 vols. top gravel, well graded from fine to coarse.
G. Grout Mix #2: For all handmade ceramic veneer sills, copings, balusters, and rails, cornices, etc., shall be lean and composed of the following:
    1. 1 vol. portland cement as above.
    2. 4 vols. clean sharp sand as above.
    3. 3 vols. top gravel, well graded from fine to coarse.
H. Clean, clear potable water

2.02 EQUIPMENT

A. Paint brushes
B. Hawks and trowels as required
C. Hose and spray nozzle
D. Grouting equipment

PART 3---EXECUTION

3.01 PREPARATION

A. Surface Preparation:
    1. Soak replacement pieces in a vat or box of clean water for one hour or more just prior to installation. The pieces should be noticeably damp at the time of setting. Drain pieces sufficiently to eliminate surface water.
    2. At the beginning of setting each day, soak all walls to be faced with clean water. Apply water with a hose and spray nozzle. Soak again with water not more than one hour before setting of replacement pieces.

3.02 ERECTION/INSTALLATION/APPLICATION

A. Removing Damaged Terra Cotta Units:
    1. Remove mortar from around damaged units by hand being careful not to chip the edges of adjacent sound units. Insert wedges as required as mortar removal progresses to hold damaged units in place until they can be removed.
    2. Carefully remove damaged units and all loose grout in cavity behind unit.
B. Installing Anchored Type Ceramic Veneer:
    1. Preparing the anchoring system:
        a. Inspect the anchors and reinforcing armature thoroughly for any sign of corrosion.
        b. Remove any rust from anchors which can be reused. Coat with one coat of a rust inhibiting primer and top coat(s) of water tolerant paint as recommended by the primer manufacturer.
        c. Install new anchors as required and as recommended by the ceramic veneer manufacturer.
    2. Setting anchors and grooves:
        a. The general contractor shall be guided by the drawings for the placing of all loop-dowel anchors or other anchors, and the provision for the 1" x 6" horizontal grooves in the concrete to permit the proper anchoring and grouting of the ceramic veneer.
        b. Grooves shall be 12" on vertical centers in all spandrels and 30" elsewhere.
        c. Alternate detail: 1/4" x 6" grooves approximately 12" on vertical centers accomplished by the use of alternate surfaced and unsurfaced form lumber.
        d. The loop-dowel anchors, or approved equal anchors, shall be installed in vertical alignment on about 12" centers; and shall be spaced on equal horizontal centers of approximately 12" but not greater than 18", and so located, where practical, that a vertical line of loop-dowel anchors will be directly in back of each vertical joint of ceramic veneer. Keep loop-dowel anchors out of 1" x 6" horizontal grooves.
        e. Dimension from face of masonry or concrete wall to face of anchored veneer shall be a nominal 4".
    3. Installing pencil rods:
        a. Install 1/4" pencil rods vertically through loops of loop-dowel anchors.
        b. Install approximately 1" away from the face of the wall.
        c. Above openings, the lower end of the pencil rods should have 4" or more bent at right angles over ceramic veneer soffits, and should lie loosely thereon.
    4. Installing loose anchors:
        a. All loose anchors shall be located in bed joints and/or interior webs on 12" to 18" horizontal centers.
        b. One end of each anchor shall be securely hooked around a pencil rod, dowel rod, or structural steel member and the other end securely hooked into the ceramic veneer.
        c. Loose anchors shall hook around 1/4" dowel pins in joints of soffit pieces. These anchors shall pass through loops and hook around loop-dowel anchors.
    5. Special loop-dowel anchors:
        1. In deep ceramic veneer anchored soffits the special loop-dowel anchors shall extend vertically down to within 1" of the ceramic veneer soffit, and shall be threaded horizontally with 1/4 pencil rods.
        2. The long dowel end of the special loop-dowel anchor shall have 2" or more bent at right angles and lay flat against the top of the ceramic veneer soffit.
        3. The loop ends of the special loop-dowel anchors shall extend down vertically at least 5" from the concrete soffit.
        4. Special loop-dowel anchors are to be of the same material as the loop-dowel anchors.
        5. Dimension from face of concrete soffit to face of anchored veneer shall be a nominal 8".
    6. Grouting:
        a. All anchored ceramic veneer shall be set in a full bed of mortar and all voids back of the ceramic veneer shall be filled solid with grout as specified under Grout Mix #1, and shall be well nodded to eliminate all air pockets.
        b. Where possible to do so, grout should be poured to a height of 6" only behind each continuous course of anchored ceramic veneer and the grout allowed to set sufficiently to "freeze" the piece in place before pouring the balance. Grout shall have sufficient plasticity to fill the joints from the rear.
        c. All copings and cornices of handmade ceramic veneer shall have filler pieces (grout plugs) at joints.
        d. Before being set in place, all handmade ceramic veneer copings, etc., shall be turned bottom side up and filled solid with a lean wet grout as specified under Grout Mix #2, andshall later be set in place on the wall and anchored in vertical joints as indicated on setting drawing.
        e. Vertical joints shall be grouted solid through openings at joints, provided in ceramic veneer before grout plugs are placed.
        f. This pre-grouting procedure is also to be used in grilles, etc., as directed and whererequired to solidly fill all voids.
C. Installing Adhesion Type Ceramic Veneer:
    1. Setting:
        a. Just prior to application of mortar coats, a limited area of the wall and the entire back of the piece of soaked ceramic veneer about to be set shall be given a brush coat of neat portland cement and water.
        b. Immediately thereafter spread on-half of th mortar coat on a limited area of the wall and the other half over the back of the piece of ceramic veneer.
            1. The mortar troweled on the back of the piece of ceramic veneer shall be screeded to a uniform thickness as measured from the face of the ceramic veneer.
            2. The other half of the mortar bed applied to the wall surface shall be screeded to a true and plumb level.
            3. The total thickness of the mortar coat shall average 3/4", but sufficient mortar shall be used to create a slight excess which will be forced out at the joints at the edge of the piece when it is tapped into place.
        c. When the piece is set against the wall it shall be driven home by repeated tapping with a rubber mallet to

GSA

        f. Any piece of ceramic veneer tipped away from the wall for readjustment or improperly set for any reason shall immediately be removed, cleaned of all mortar, including the wall surface, and reset in accordance with the above procedure.
    2. Soffits: Each piece of ceramic veneer, in addition to the usual centers and wooden wedges, shall be supported by suitable bent vertical wooden shores exerting a constant upward pressure until the mortar coat is set for several days.
D. Tooling and pointing:
    1. If pointing is not specified, all mortar joints shall be tooled as the setting progresses to form a concave joint.
    2. When pointing is specified, all mortar joints shall be raked to a depth of 1/2".
    3. Before pointing, joints shall be saturated with clean water, after which they shall be filled solidly with pointing mortar and tooled.
    4. All surplus mortar and stains shall be removed as the setting progresses and the surface shall be left clean.

3.03 ADJUSTING/CLEANING

A. Wipe all excess mortar as the work progresses. Dry brush at the end of each day's work.
B. After mortar is thoroughly set and cured, wash new masonry surfaces, walls, sills, overhangs, etc., of all loose mortar, and dirt with soap or washing powder detergent and rinse thoroughly with clean water. Abrasives or metal tools shall not be used.

REVISIONS

DATE/DELTA	REMARKS

417 S HILL STREET
HISTORIC REHABILITATION
417 SOUTH HILL STREET
LOS ANGELES, CALIFORNIA

BICKEL GROUP ARCHITECTURE
BICKEL GROUP INCORPORATED
3600 BIRCH STREET, SUITE 120
NEWPORT BEACH, CA 92660
P: 949.757.0411 F: 949.757.0511
www.bickelgrp.com

LICENSED ARCHITECT
JAMES M. BICKEL
C-26625
06-23
RENEWAL DATE
STATE OF CALIFORNIA

The plans, ideas, arrangements and designs indicated or represented by this drawing are owned by, and are the property of BICKEL GROUP, and were created and developed solely for use on, and in connection with the specific project, and shall not be used, in whole or in part, for any purpose for which they were not originally intended without written permission from BICKEL GROUP © 2021

SHEET TITLE:

Standard For Rehabilitation

SUB DATE	**06/07/2022**
BID DATE	
DATE:	**05/23/2022**
DRAWN BY:	**TA**
JOB NO:	**21051**
CHECKED BY:	**EM**

SHEET NUMBER:

A-0.2D

Patching Hairline Cracks In Plaster

Procedure code:
9210025
Source:
Hspg Prepared For Nps - Sero
Division:
Finishes
Section:
Gypsum Plaster
Last Modified:
04/20/2015

PART 1---GENERAL

1.01 SUMMARY

A. This procedure includes guidance on patching hairline cracks in plaster with reinforcing tape and joint compound.
B. Cracks may be cyclical, opening and closing with seasonal variation in humidity which causes the lath to swell and shrink.
C. See 01100-07-S for general project guidelines to be reviewed along with this procedure. These guidelines cover the following sections:
   1. Safety Precautions
   2. Historic Structures Precautions
   3. Submittals
   4. Quality Assurance
   5. Delivery, Storage and Handling
   6. Project/Site Conditions
   7. Sequencing and Scheduling
   8. General Protection (Surface and Surrounding)

These guidelines should be reviewed prior to performing this procedure and should be followed, when applicable, along with recommendations from the Regional Historic Preservation Officer (RHPO).

1.02 PROJECT/SITE CONDITIONS

A. Environmental Requirements:
   1. Keep the room temperature above 55 degrees F until the plaster/joint compound has set.
   2. Provide plenty of ventilation as the plaster dries.

PART 2---PRODUCTS

2.01 MANUFACTURERS

A. USG Corporation www.usg.com
B. TKO Waterproof Coatings, LLP www.tkocoatings.com

2.02 MATERIALS

A. Joint compound such as "Sheetrock Setting-Type Joint Compound" (USG Corp.), "Krack-kote" (TKO Waterproof), or approved equal.
   1. "Krack-kote": Good for problem cracks that may break through the Sheetrock tape and compound.
      a. It uses a pliable adhesive and a glass fiber reinforcing tape; it has more flexibility and strength than ordinary joint compound.
      b. Available from large paint supply stores.
      c. It is more expensive and more timely to apply than ordinary joint compounds.
B. Reinforcing tape (cloth or paper): Cloth is better for flat surfaces because of its open-weave, but it is difficult to find in the U.S.
C. Acrylic latex caulk

2.03 EQUIPMENT

A. Wide joint knife (approximately 5-6 inches wide)
B. Sponge or heavy-nap cloth
C. Caulking gun
D. Crack widener or triangular can opener
E. Stiff bristle brushes or vacuum

PART 3---EXECUTION

3.01 EXAMINATION

GSA

3.02 ERECTION, INSTALLATION, APPLICATION

A. Slightly widen the crack with a sharp, pointed tool like a crack widener or a triangular can opener.
B. Brush or vacuum surface to remove dust and debris.
C. Apply joint compound with a wide joint knife; Butter the compound into the crack, spreading it about 3 inches on either side of the crack.
D. Center mesh reinforcing tape over the crack, and force the tape down into the bed of the joint compound with the knife; Remove any excess compound by wiping with the joint knife.
E. When the tape is bedded, cover surface with a thin layer of compound and smooth as much as possible by working with the joint knife.
F. When the first coat has dried (at least 24 hours), smooth out any ridges by "wet sanding" with a damp sponge or a heavy-nap cloth folded flat or wrapped around a suitable block.
G. Apply a second thin coat of joint compound and feather the edge at least 1 inch beyond the first coat.
H. After the second coat has dried, wet-sand lightly and apply a thin finishing coat.

I. Lightly sand the surface again, and clean off the area with damp sponge.
J. After the surface has dried, brush off any plaster residue or dust.

NOTE: For gaps between plaster surfaces and surrounding woodwork, apply acrylic latex caulk using a caulking gun.

Patching Small Chips And Cracks In Plaster

Procedure code:
9210055
Source:
Tacoma Union Station Courthouse/Tacoma, Wa - Gsa/Pbs
Division:
Finishes
Section:
Gypsum Plaster
Last Modified:
02/24/2017

PART 1---GENERAL

1.01 SUMMARY

A. This procedure includes guidance on patching small chips, cracks or depressions in plaster surfaces.
B. See 01100-07-S for general project guidelines to be reviewed along with this procedure.
   These guidelines cover the following sections:
   1. Safety Precautions
   2. Historic Structures Precautions
   3. Submittals
   4. Quality Assurance
   5. Delivery, Storage and Handling
   6. Project/Site Conditions
   7. Sequencing and Scheduling
   8. General Protection (Surface and Surrounding)

   These guidelines should be reviewed prior to performing this procedure and should be followed, when applicable, along with recommendations from the Regional Historic Preservation Officer (RHPO).
C. For guidance on repairing hairline cracks, see 09210-02- R; for guidance on repairing large holes, see 09200-12-R and 09210-03-R.

1.02 REFERENCES

A. American National Standards Institute (ANSI) www.ansi.org
B. American Society for Testing and Materials (ASTM) www.astm.org

PART 2---PRODUCTS

2.01 MANUFACTURERS

A. USG Corporation www.usg.com

2.02 MATERIALS

A. Gypsum Plaster Materials:
   1. General: gypsum plastering materials shall conform to ANSI A42.1. Provide neat or ready-mixed materials at installer's option unless indicated otherwise.
   2. Base coat plaster: Perlite gypsum plaster such as "Structo-Lite" (USG Corp.), or approved equal.
   3. Base coat aggregate: Sand.
   4. Finish coat plaster: Keene's cement.
   5. Finishing lime: Type is installer's option.
B. Bonding Materials: Bonding agent shall conform to ASTM C631.

2.03 EQUIPMENT

1. Joint knife
2. Sponge or heavy-nap cloth
3. Crack widener or triangular can opener
4. Stiff bristle brushes
5. Hawk
6. Slicker (flexible straight-edge)
7. Plasterer's trowel

GSA

PART 3---EXECUTION

3.01 ERECTION, INSTALLATION, APPLICATION

A. Scrape loose or damaged finish plaster and peeling paint from surface with chisel or joint knife. Remove material where required to enlarge cracks, chips, holes, etc. to at least 1/2 inch across and undercut to improve bonding of new material.
B. Brush or vacuum surface to remove dust and debris.
C. Moisten the surface by lightly spraying a fine mist of clean water from a spray bottle.
D. Apply skim finish coat over low areas to bring entire= finished surface out flush with the projecting firm and sound layers of adjacent plaster or paint. Form plaster as required to match original configuration and design or ornamental plaster.
E. Once dry, sand by hand to produce a surface without bumps, cracks or depressions, ready to receive finish treatment.

3.02 ADJUSTING/CLEANING

A. Upon completion of this work, all floors, walls and other adjacent surfaces that are stained, marred, or otherwise damaged by work in this procedure shall be cleaned and repaired and all work and the adjacent areas shall be left in a clean and perfect condition.
B. All completed work shall be adequately protected from damage by subsequent building operations and effects of weather. Protection shall be by methods recommended by the manufacturer of installed materials and as approved by the RHPO.

Replicating Ornamental Plaster Trim

Procedure code:
9200055
Source:
The Old Custom House/Ny, Ny - Gsa/Pbs, 2-27-91
Division:
Finishes
Section:
Lath & Plaster
Last Modified:
03/13/2017

ORNAMENTAL PLASTER WORK IS A SKILLED CRAFT REQUIRING THE WORK OF A QUALIFIED AND EXPERIENCED CRAFTSMAN.

PART 1---GENERAL

1.01 SUMMARY

A. This procedure includes guidance on replicating ornamental plaster trimwork to replace that which is deteriorated or missing.

B. See 01100-07-S for general project guidelines to be used along with this procedure. These guidelines cover the following sections:

1. Historic Structures Precautions
2. Submittals
3. Quality Assurance
4. Delivery, Storage and Handling
5. Project/Site Conditions
6. Sequencing and Scheduling
7. General Protection (Surface and Surrounding)

These guidelines should be reviewed prior to performing this procedure and should be followed along with recommendations from the Regional Historic Preservation Officer (RHPO).

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM) www.astm.org

1.03 SUBMITTALS

A. Product Data: Submit manufacturer's product data for plaster materials, lath and accessories.

B. Design Data/Test Reports/Certificates:

1. Material Certificates: Submit producer's certificates for plaster aggregates to show that materials comply with requirements.
2. Schedule of Work: Submit a schedule of spaces that require ornamental plaster, and a list of ornamental plaster items or areas that require repair or replacement in each of the affected spaces. Indicate procedures to be used, and time requirements.

1.04 QUALITY ASSURANCE

A. Regulatory Requirements: Reference Standards: Comply with applicable requirements of Chapter 9 - Ornamental Plaster, in "Plastering Skills", published by American Technical Publishers, Inc. Comply with other specified standards.

1.05 PROJECT/SITE CONDITIONS

A. Environmental Requirements:

1. General: Comply with requirements of referenced plaster application standards and recommendations of plaster manufacturer for environmental conditions before, during and after application of plaster.
2. Cold Weather Protection: When outdoor temperature is below 55 degrees F., maintain continuous uniform temperature of not less than 55 degrees F., nor more than 70 degrees F., for not less than 1 week prior to plaster application, during its application, and until plaster is dry but for not less than one week after application is complete. Distribute heat evenly; prevent concentrated or uneven heat from contacting plaster near heat source.
3. Ventilation: Ventilate building spaces as required to remove water in excess of that required for hydration of plaster. Begin ventilation immediately after plaster is applied and continue until it sets.
4. Protection: Protect adjacent work from soiling, splattering, moisture and other harmful effects which might result from plastering. Obtain approval of the protection from the contracting officer.

PART 2---PRODUCTS

2.01 MANUFACTURERS

A. National Gypsum Co.
Gold Bond Building Products Division
www.nationalgypsum.com

B. USG Corporation
www.usg.com

C. Perma-Flex Mold Company
www.perma-flex.com

D. Charles Street Supply Co.
www.charlesstsupply.com

2.02 MATERIALS

A. Gypsum Plaster Materials:

1. Base coat plasters: ASTM C28, types as indicated below.

   a. Gypsum neat plaster such as "Red Top Gypsum Plaster" (USG.com), "Two-Way Hardwall Gypsum Plaster" (National Gypsum Co.), or approved equal
   b. High strength gypsum neat plaster with a minimum average dry compressive strength of 2,800 psi per ASTM C472 for a mix of 100 lbs. plaster and 2 cu. ft. of sand such as "Structo-Base" (USG), or approved equal.
2. Finish coat plasters: Types as indicated below:
   a. Gypsum gauging plaster, ASTM C28; for flatwork such as, "Red Top Gauging Plaster" (USG), "Gold Bond Gauging Plaster" (National Gypsum Co.), or approved equal.
   b. Gypsum molding plaster, ASTM C59; for crown moldings such as "USG No. 1 Moulding Plaster" (USG) "Gold BondMoulding Plaster" (National Gypsum Co.), or approved equal.
   c. Gypsum casting plaster, ASTM C59; for ornamental plaster such as "USG No. 1 Casting Plaster" (USG), or approved equal.
3. Finishing Hydrated Limes: ASTM C206; Type S, or approved equal.
4. Aggregates for Base Coat Plasters: ASTM C35, sand.

B. Clean, potable water

C. Bonding Compound for Gypsum Plaster: ASTM C631.

D. Plaster Molds: Urethane rubber liquid mold material that can produce detailed impressions (Perma Flex Mold Co.), or approved equal.

E. Reinfocing Fibers: Sisal hemp fibers, or polypropylene fibers, not more than 2" long (Plastic Tooling Co.), or approved equal.

F. Anchors for Reattachment of Existing Plaster: Zinc plated washers with appropriate mechanical fasteners for existing substrates, (Charles Street Supply Co.), or approved equal.

2.03 MIXES

A. Plaster Base Coat Compositions: Comply with ASTM C842 and manufacturer's directions for gypsum plaster base coat proportions for three-coat work:

1. Scratch Coat: High strength gypsum gauging plaster with job-mixed sand.
2. Brown Coat: High strength gypsum gauging plaster with job-mixed sand.

B. For Finish Coat: Proportion casting plaster and molding plaster to comply with the manufacturer's instructions. Proportion gypsum gauging plaster to comply with ASTM C842; 1 part plaster and 2 parts lime.

PART 3---EXECUTION

3.01 EXAMINATION

A. Examine surfaces to receive ornamental plaster and conditions under which the ornamental plaster will be installed. Proceed with the ornamental plaster work only when substrate surfaces and conditions comply with referenced standards, to ensure satisfactory installations.

1. Promptly notify the contracting officer of conditions that need to be corrected or coordinated.

3.02 PREPARATION

A. Surface Preparation:

1. Remove ornamental plaster that is damaged or loose and requires replacement, or that has to be reset.
2. Reinforce and secure loose ornamental plaster that is to remain, using appropriate concealed methods (see 09210-04-R for guidance).
3. Make molds or screeds as necessary for replacement of ornamental plaster. Match existing plaster profiles.
4. Make accurate reproductions for missing, deteriorated or damaged ornamental plaster.
5. Clean plaster surfaces to be restored, to remove loose and deleterious materials that may affect adhesion or application of new plaster. Re-attach loose lath or install new lath as required.
6. Spray existing plaster to be pointed or patched with water, or use bonding agent, to ensure adhesion of new plaster. Install keying systems for larger pieces as necessary. Comply with referenced standards.
7. All existing plaster to be painted shall be stripped down to a bare finish plaster surface with a non-water based solvent of paint stripper which cannot be water flushed clean.
8. Measure and layout ornamental plaster accurately to maintain pattern and alignment of the work.

3.03 ERECTION, INSTALLATION, APPLICATION

NOTE: Conform to the requirements of the latest edition of "Gypsum Construction Handbook" published by USG Corporation concerning application of ornamental plaster.

A. Make a template from sheets of metal (brass) cut full-scale in shapes to match existing; use to screed or form gypsum plaster to desired shapes and contours.

1. Coat metal sheet with layout dye - a blue dye that makes the scribed pattern easier to follow.
2. When the dye is dry, scribe, cut and carefully file the template to remove any roughness or other imperfections that might be transferred to the finished work.
3. Use a sled to guide the template as it is pushed through the plastic mass. Basic parts of the sled include a "slipper-board" and the board to which the template is nailed.
   a. For bench work the sled is guided by the table edge. Bench-run molds are installed on the job with mechanical fasteners or adhesively attached with gypsum plaster.
   b. For run-in-place work, a guide strip is attached to the wall or ceiling and forms one edge of the pattern; after work is completed the guide strip is removed.
4. For circular shapes:
   a. Follow procedures described in Section 3.03 A.1.- A.3. above, except scribe the center line of the circular shape on the template.
   b. Center a pivot plate to this line and attach to the template board.

C. Mix Plaster: Use special plaster designed and manufactured for ornamental plaster work.

NOTE: Mix the plaster a little below normal consistency for the first mix, then allow the mix to "cream" a bit before placing it on the bench in front of the template. For run-in-place work a slightly stiffer consistency is desirable.

1. For Hand Mixing:
   a. Weigh the plaster, and measure or weigh the water.
   b. Sift plaster into water evenly. Do not drop handsful of plaster into the water at one time.
   c. Allow to soak 2 minutes undisturbed, then mix thoroughly. Stir from bottom, forcing material to top. Take care to avoid beating air into mix. Proper mixing forces air out of mix.
   d. Continue mixing until a smooth, even mass is produced.
2. For Mechanical Mixing: Mechanically mix cementitious and aggregate materials for plasters to comply with applicable referenced application standards and with recommendations of plasters manufacturer.
   a. Weigh plaster and measure water accurately.
   b. Sift or strew plaster slowly and evenly.

   c. Allow it to soak 2 to 5 minutes, and mix for 2 to 5 minutes.

NOTE: For batches of 10 to 50 lbs., use a 3" diameter, 3-blade, 25 degree pitch propeller with 1/4 or 1/3 hp. 1,760 rpm direct-drive motor. For batches of 50 to 200 lb., use a 4" diameter, 3-blade, 25 degree pitch propeller with 1/2 hp. 1,760 rpm direct-drive motor.

D. Replicate the Ornamental Trim:

1. For Run Work or Straight Molds:
   NOTE: This method is used to produce staff work or pattern stock having parallel edges or to form a straight molding.
   a. For bench work, some plaster should be allowed to lap over the end of the bench to act as an anchor and prevent

GSA

2. 2. For Circular Shapes (Turning): Like run work, turning can be done in the shop or run-in-place.
   a. For bench work, place a center post in a hole in the bench.
   b. For run-in-place work, position the center post accurately at the center of the circular shape to be formed and securely attach or brace to the structural supports.
      NOTE: THE CENTER POST SHOULD HAVE A RUNNING THREAD, WITH A DOUBLE NUT FOR HEIGHT ADJUSTMENT. THE PIVOT POINT MUST BE ABSOLUTELY RIGID AND SET HIGHER THAN THE TOP OF THE PATTERN TO BE MADE, SO THAT THE TEMPLATE WILL SCREED CLEARLY AS IT ROTATES AROUND THE PIVOT POINT.
3. Duplicate plaster molds by taking impressions from existing plaster molds; create new rubber molds from these impressions and cast plaster into these molds.
4. Remove plaster molds after plaster has cured, following plaster manufacturer's instructions.
5. Strip and clean existing decoration to produce a clean, sharp mold.

3.04 ADJUSTING/CLEANING

A. When replication and plasterwork is completed, remove unused materials, containers and equipment. Clean floors and adjacent surfaces of all plaster debris, including plaster droppings daily.

B. Provide final protection and maintain conditions, in a manner suitable to the RHPO, which ensure ornamental plaster being without damage or deterioration at time of substantial completion.

Duplicating Plaster Castings

Procedure code:
9200115
Source:
Developed For Hsgp (Nps - Sero)
Division:
Finishes
Section:
Lath & Plaster
Last Modified:
02/02/2017

PART 1---GENERAL

1.01 SUMMARY

A. This procedure includes guidance on duplicating plaster ornament that is chipped or has deteriorated. Plaster of Paris is the most common casting material.

B. See 01100-07-S for general project guidelines to be reviewed along with this procedure. These guidelines cover the following sections:

1. Safety Precautions
2. Historic Structures Precautions
3. Submittals
4. Quality Assurance
5. Delivery, Storage and Handling
6. Project/Site Conditions
7. Sequencing and Scheduling
8. General Protection (Surface and Surrounding)
   These guidelines should be reviewed prior to performing this procedure and should be followed, when applicable, along with recommendations from the Regional Historic Preservation Officer (RHPO).

PART 2---PRODUCTS

2.01 MANUFACTURERS

A. Rubber Casting Materials:

1. Abatron, Inc.
   5501 95th Ave.
   Kenosha, WI 53144
   800/445-1754 or 414/653-2000
2. Industrial Plastic Supply
   309 Canal Street
   New York, NY 10013
   212/226-2010
3. Perma-Flex Mold Company
   1919 Livingston Avenue
   Columbus, OH 43209
   614/252-8034
4. Polytek Development Corp.
   P.O. Box 384
   Lebanon, NJ 08833
   908/534-5990
5. Smooth-On, Inc.
   1000 Valley Road
   Gillette, NJ 07933
   908/647-5800

B. Rubber Latex: #660:

1. Cementex Co.
   336 Canal St.
   New York, NY 10013
   212/741-1770

C. Plaster:

1. Gold Bond Building Products Division
   National Gypsum Co.
   P.O. Box 25884
   Charlotte, NC 28229
   704/536-0023
2. U.S. Gypsum Association
   810 First Street NE,
   #510
   Washington, DC 20002
   202/289-5440,
   FAX 202/289-3707

2.02 MATERIALS

A. Plaster of Paris: "Kal-Kote Finishing Plaster" (Gold Bond, National Gypsum Co.), "Red Top Molding Plaster" (U.S. Gypsum Association), or approved equal.

B. Spackle or patching compound

C. Rubber latex such as #660 (Cementex Co.)

D. Paper towels

E. Plywood

F. Clean, potable water

G. Cheese cloth or burlap strips

2.03 EQUIPMENT

A. Stiff bristle brushes

B. Heating lamp, electric hair dryer or warm oven

2.04 MIXES

NOTE: VERIFY MIX WITH MANUFACTURER'S INSTRUCTIONS

A. 7 parts plaster

B. 4 parts water

PART 3---EXECUTION

3.01 PREPARATION

A. Surface Preparation:

1. Remove ornamental plaster that is damaged or loose and requires replacement, or that has to be reset.
2. Reinforce and secure loose ornamental plaster that is to remain, using appropriate concealed methods.
3. Clean plaster surfaces to be restored, to remove loose and deleterious materials that may affect adhesion or application of new plaster. Reattach loose lath or install new lath as required.
4. Spray existing plaster to be pointed or patched with water, or use bonding agent, to ensure adhesion of new plaster. Install keying systems for larger pieces as necessary. Comply with referenced standards.
5. All existing plaster to be repaired shall be stripped down to a bare finish plaster surface with a non-water based solvent or paint stripper which is not water flushed clean.

3.02 ERECTION/INSTALLATION/APPLICATION

NOTE: IT IS NOT ALWAYS NECESSARY TO DETACH THE PLASTER ORNAMENT IN ORDER TO DUPLICATE IT. HOWEVER, IF THE PLASTER ORNAMENT CAN NOT BE REMOVED FROM THE WALL OR CEILING TO MAKE THE MOLD, CURING MAY TAKE SEVERAL DAYS BETWEEN LATEX COATS AND SEVERAL WEEKS FOR THE FINAL CURING.

A. Making the Mold:

1. Detach from the ceiling or wall plaster casting to be duplicated.
2. Patch the fragment or fill in any damaged portions of the pattern using spackle or other patching compound.
3. Carefully clean the fragment for mold making.
4. Brush the master piece with the rubber latex.
5. Cure the latex at a temperature of about 110oF.; Use an infrared heating lamp, an electric hair dryer, or a warm oven to provide the source of heat; Cure for about 1 hour using heat.
6. When the rubber has cured, apply a second latex coating (the number of coats required is dictated by the size of the original and the depth of the relief); Cure as above.

B. Building the Mother:

1. The purpose of the mother is to support the mold when it is filled with wet plaster.

GSA

   the mold.
4. Separate the mother from the rubber mold as soon as the plaster has set (in less than an hour).
5. Wash the interior of the mold with soap and water and remove any residual byproducts left from the curing process.

C. Mixing the Plaster:

1. Add 7 parts by volume of plaster to 4 parts water; Use cold water to retard the set-up time.
2. Sprinkle plaster powder in slowly; Stir as little as possible.

D. Casting the Plaster:

1. Before pouring plaster into mold, fill the mold with water and then pour water out (this will moisten the walls and ensure penetration of the plaster into all crevices).
2. Add plaster and cheesecloth or burlap strips for strength; Jog the plaster-filled mold gently to nudge plaster into all the indentations.
3. Level the plaster; Plaster should be hard enough to remove from the mold in 30 minutes; Allow 24 hours to air dry before installing.

E. Install the plaster casting using a thin coat of plaster of paris as an adhesive; Hold the piece in place for a few minutes until the plaster sets; A mastic adhesive or epoxy or gypsum board joint cement are other good adhesives for light pieces.

REVISIONS

DATE/DELTA	REMARKS

417 S HILL STREET
HISTORIC REHABILITATION
417 SOUTH HILL STREET
LOS ANGELES, CALIFORNIA

BICKEL GROUP
ARCHITECTURE
BICKEL GROUP INCORPORATED
3600 BIRCH STREET, SUITE 120
NEWPORT BEACH, CA 92660
P: 949.757.0411 F: 949.757.0511
w w w . b i c k e l g r p . c o m

The plans, ideas, arrangements and designs indicated or represented by this drawing are owned by, and are the property of BICKEL GROUP, and were created and developed solely for use on, and in connection with this specific project, and shall not be used, in whole or in part, for any purpose whatsoever with which they were not originally intended without written permission from BICKEL GROUP. © 2021

SHEET TITLE:

Standard
For
Rehabilitation

SUB DATE	06/07/2022
BID DATE	
DATE:	05/23/2022
DRAWN BY:	TA
JOB NO:	21051
CHECKED BY:	EM

SHEET NUMBER:

A—0.2E

REVISIONS

DATE/DELTA	REMARKS

417 S HILL STREET
HISTORIC REHABILITATION
417 SOUTH HILL STREET
LOS ANGELES, CALIFORNIA

BICKEL GROUP ARCHITECTURE
BICKEL GROUP INCORPORATED
3600 BIRCH STREET, SUITE 120
NEWPORT BEACH, CA 92660
P: 949.757.0411 F: 949.757.0511
www.bickelgrp.com

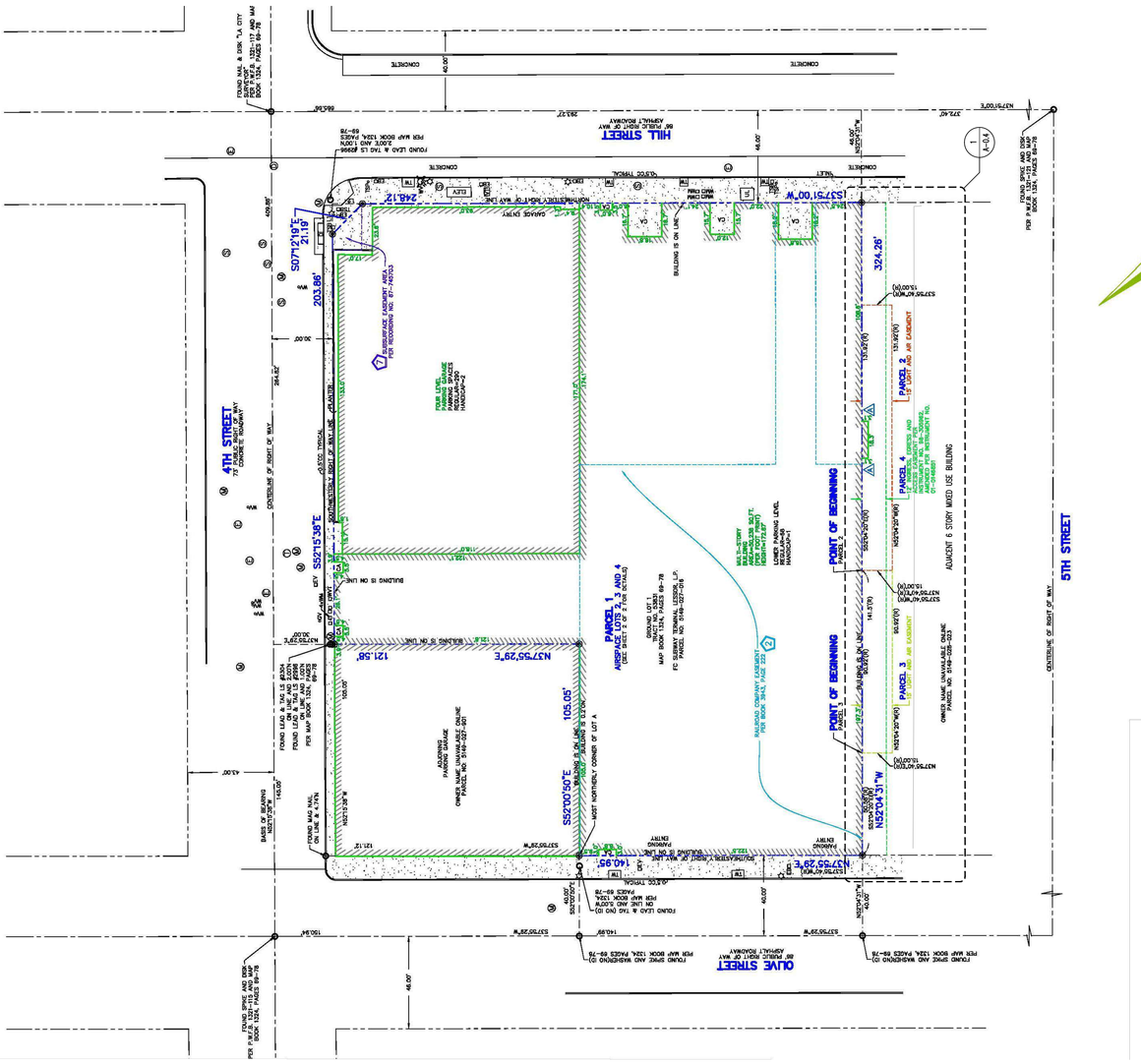
The ideas, ideas, arrangements, and designs indicated or represented by this drawing are owned by and are the property of BICKEL GROUP and were created, evolved and developed for use on the project described herein. None of such ideas, designs or plans shall be used by or disclosed to any person, firm or corporation for any purpose whatsoever without the written permission of BICKEL GROUP, 2021

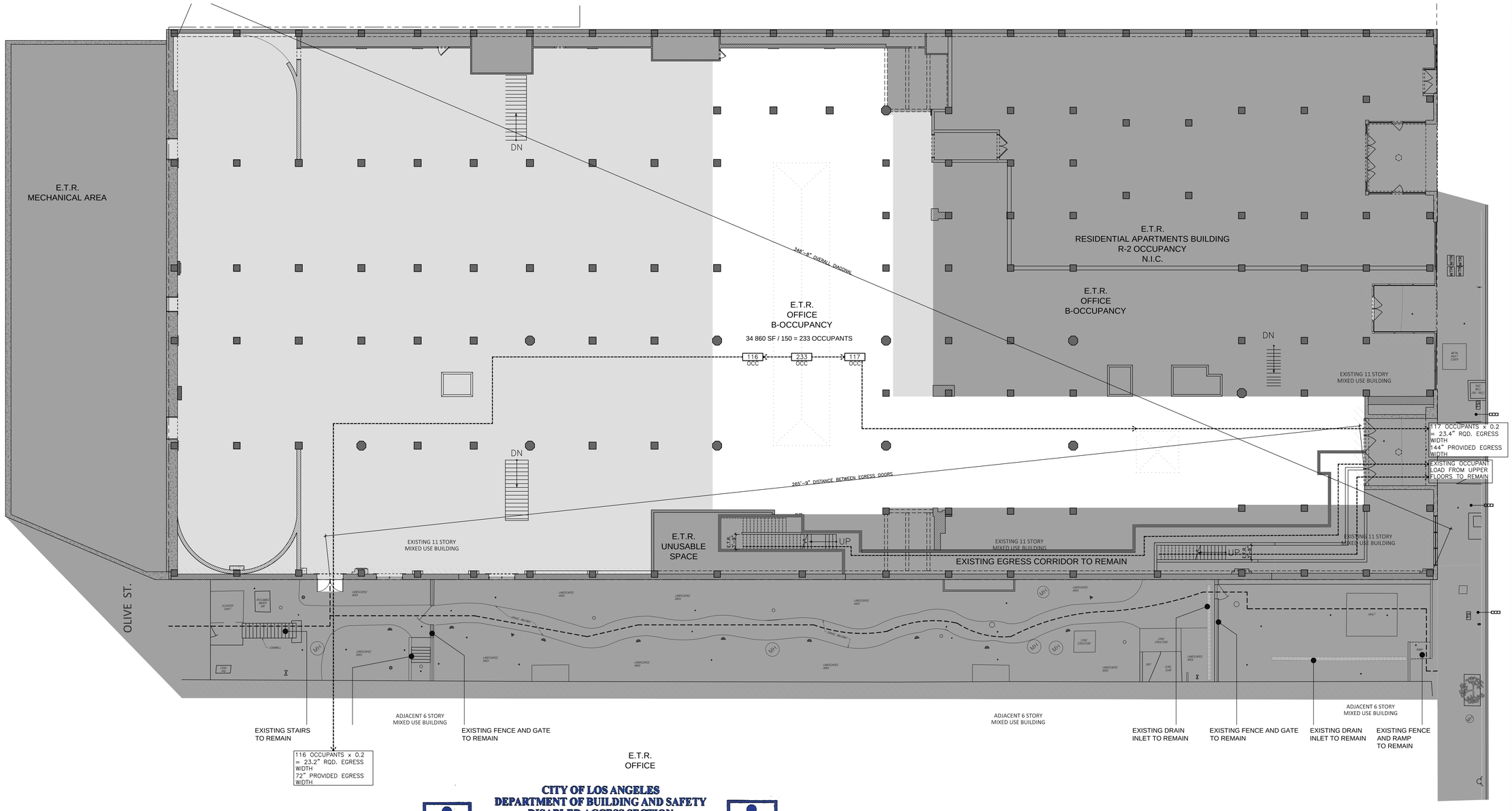
SHEET TITLE:

SITE PLAN FOR REFERECE ONLY

SUB DATE	04/17/2022
BID DATE	
DATE:	06/13/2022
DRAWN BY:	TA
JOB NO:	21-051
CHECKED BY:	EM

SHEET NUMBER: **A-0.3**





CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
DISABLED ACCESS SECTION

This set of plans and specifications has been reviewed and is approved for compliance with state and local laws and ordinances related to accessibility to public accommodations and housing.

The stamping of this set of plans and specifications shall not be held to permit or to be an approval of the violation of any provisions of federal, state, and local laws and ordinances related to accessibility to public accommodations and housing.

By: EDDIE GARIN **Total of** 7 **Sheets**

Date: 03/31/2023

LEGEND- EGRESS PLAN

OCC — TOTAL NUMBER OF OCCUPANTS FOR THAT ROOM/AREA PER CBC TABLE 1004.1.2

CUMULATIVE OCCUPANT LOAD FOR EGRESS PATH/EXIT

EXIT SIGNS TO BE PROVIDED UNDER SEPARATE TENANT IMPROVEMENT PERMIT PRIOR OCCUPANCY

EXISTING & PROPOSED ENLARGED SITE PLAN & EGRESS PLAN

SCALE = 3/32" = 1'-0"

LEGEND

- PROPERTY LINE
- EXISTING EXIT PATH TO STREET TO REMAIN
- EXISTING CONCRETE WALL TO REMAIN
- EXISTING CONSTRUCTION TO REMAIN
- EXISTING MASONRY TO REMAIN

NORTH

SPACE SIGNIFICANCE | SEE FLOOR PLAN FOR MORE INFORMATION

- **PART A** | ALL CEILING & FLOORING TO BE RESTORED
- **PART B** | ALL CEILING AND FLOORING TO BE RESTORED
- **OUT OF SCOPE**

REVISIONS

DATE/DELTA	REMARKS

417 S HILL STREET
HISTORIC REHABILITATION

417 SOUTH HILL STREET
LOS ANGELES, CALIFORNIA

BICKEL GROUP ARCHITECTURE
BICKEL GROUP INCORPORATED
3600 BIRCH STREET, SUITE 120
NEWPORT BEACH, CA 92660
P: 949.757.0411 F: 949.757.0511
w w w . b i c k e l g r p . c o m

LICENSED ARCHITECT — JAMES A. BICKEL — C-28855 — 06-22 — RENEW DATE — STATE OF CALIFORNIA

The plans, ideas, arrangements and designs indicated or represented by this drawing are owned by, and are the property of BICKEL GROUP, and were created and developed solely for use on, and in connection with this specific project, and shall not be used, in whole or in part, for any purpose for which they were not originally intended without written permission from BICKEL GROUP © 2021

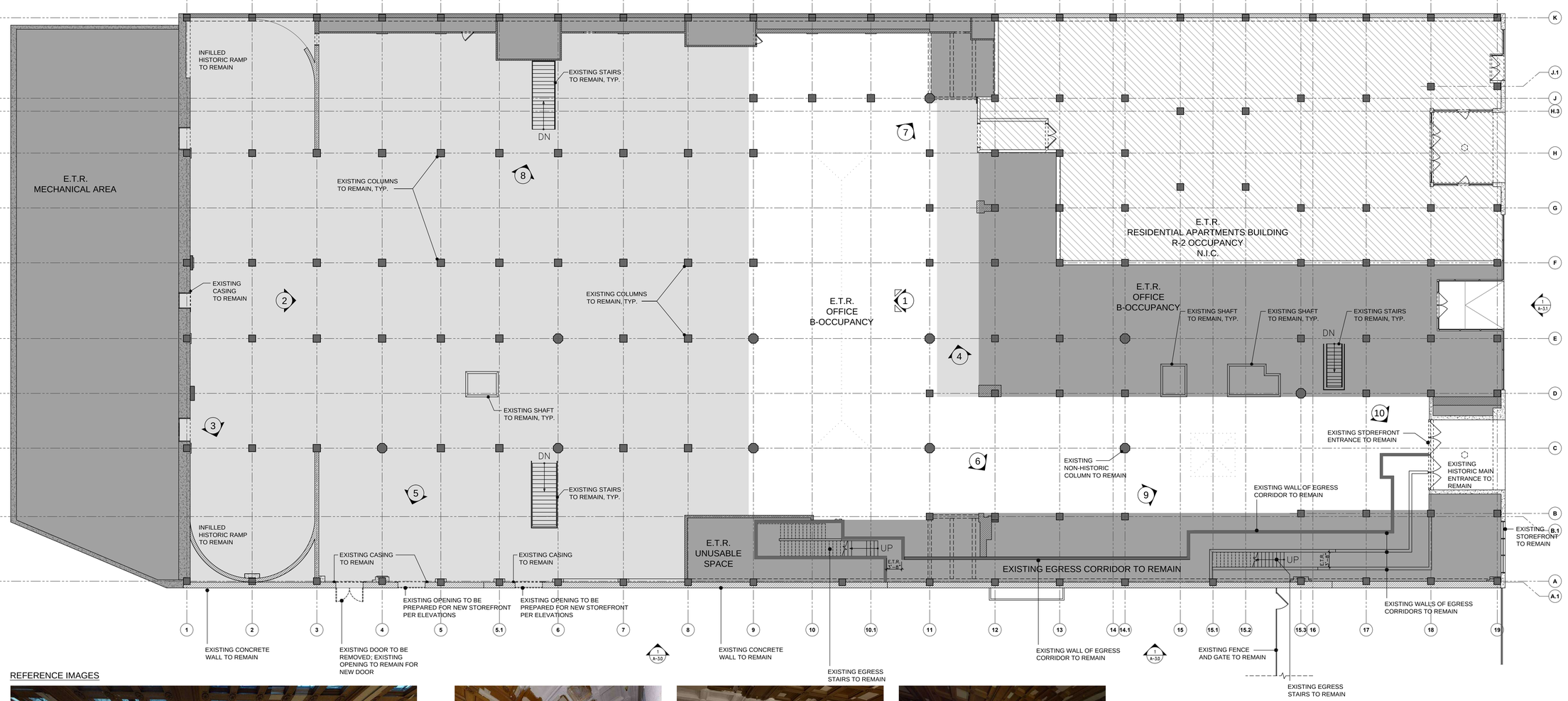
SHEET TITLE:

ENLARGED SITE PLAN @ PASEO

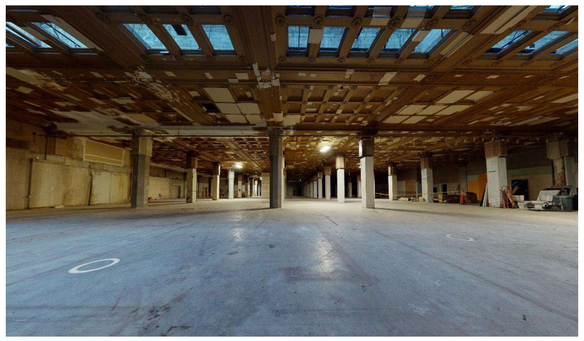
SUB DATE	06/17/2022
BID DATE	
DATE:	06/13/2022
DRAWN BY:	TA
JOB NO:	21051
CHECKED BY:	EM

SHEET NUMBER:

A-0.4


INFILLED HISTORIC RAMP TO REMAIN
EXISTING STAIRS TO REMAIN, TYP.
DN
E.T.R. MECHANICAL AREA
EXISTING COLUMNS TO REMAIN, TYP.
EXISTING CASING TO REMAIN
EXISTING COLUMNS TO REMAIN, TYP.
E.T.R. OFFICE B-OCCUPANCY
E.T.R. RESIDENTIAL APARTMENTS BUILDING R-2 OCCUPANCY N.I.C.
E.T.R. OFFICE B-OCCUPANCY
EXISTING SHAFT TO REMAIN, TYP.
EXISTING SHAFT TO REMAIN, TYP.
EXISTING STAIRS TO REMAIN, TYP.
EXISTING SHAFT TO REMAIN, TYP.
EXISTING STOREFRONT ENTRANCE TO REMAIN
EXISTING NON-HISTORIC COLUMN TO REMAIN
EXISTING HISTORIC MAIN ENTRANCE TO REMAIN
EXISTING WALL OF EGRESS CORRIDOR TO REMAIN
INFILLED HISTORIC RAMP TO REMAIN
EXISTING CASING TO REMAIN
EXISTING CASING TO REMAIN
E.T.R. UNUSABLE SPACE
EXISTING STOREFRONT TO REMAIN
EXISTING EGRESS CORRIDOR TO REMAIN
EXISTING OPENING TO BE PREPARED FOR NEW STOREFRONT PER ELEVATIONS
EXISTING OPENING TO BE PREPARED FOR NEW STOREFRONT PER ELEVATIONS
EXISTING WALLS OF EGRESS CORRIDORS TO REMAIN
EXISTING CONCRETE WALL TO REMAIN
EXISTING DOOR TO BE REMOVED; EXISTING OPENING TO REMAIN FOR NEW DOOR
EXISTING CONCRETE WALL TO REMAIN
EXISTING EGRESS STAIRS TO REMAIN
EXISTING WALL OF EGRESS CORRIDOR TO REMAIN
EXISTING FENCE AND GATE TO REMAIN
EXISTING EGRESS STAIRS TO REMAIN

REFERENCE IMAGES



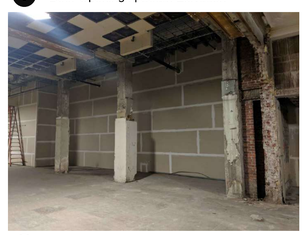
1 Main Skylight Hall

2 Waiting Room & Concourse Looking East

3 Concrete Filled-in Ramp, south

4 Existing Columns, Typ.

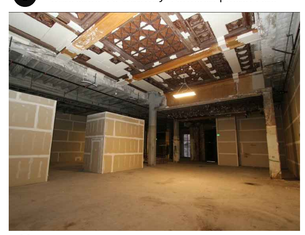
5 Door Openings | South Elevation



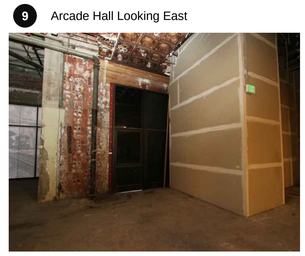
6 Wall | Egress Corridor

7 Historic Low Sofit

8 Staircase To Subway Terminal | Main Hall



9 Arcade Hall Looking East



10 Existing Storefront Entrance| East Elevation

EXISTING/DEMO FLOOR PLAN | GROUND FLOOR

SCALE = 3/32" = 1'-0"

LEGEND

- EXISTING CONCRETE WALL TO REMAIN
- EXISTING CONSTRUCTION TO REMAIN
- EXISTING MASONRY WALL TO REMAIN

SPACE SIGNIFICANCE

- **PART A** | ALL CEILING & FLOORING TO BE RESTORED
- **PART B** | ALL CEILING AND FLOORING TO BE RESTORED
- **OUT OF SCOPE**
- NOT IN CONTRACT | NEIGHBORING PROPERTY

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
DISABLED ACCESS SECTION

This set of plans and specifications has been reviewed and is approved for compliance with state and local laws and ordinances related to accessibility to public accommodations and housing.

The stamping of this set of plans and specifications shall not be held to permit or to be an approval of the violation of any provisions of federal, state, and local laws and ordinances related to accessibility to public accommodations and housing.

By: EDDIE GARIN **Total of** 7 **Sheets**

Date: 03/31/2023

REVISIONS

DATE/DELTA	REMARKS

417 S HILL STREET
HISTORIC REHABILITATION
417 SOUTH HILL STREET
LOS ANGELES, CALIFORNIA

BICKEL GROUP ARCHITECTURE
BICKEL GROUP INCORPORATED
3600 BIRCH STREET, SUITE 120
NEWPORT BEACH, CA 92660
P: 949.757.0411 F: 949.757.0511
www.bickelgrp.com

LICENSED ARCHITECT — C-28967 — 06-23 RENEW DATE — STATE OF CALIFORNIA

The plans, ideas, arrangements and designs indicated or represented by this drawing are owned by, and are the property of BICKEL GROUP, and were created and developed solely for use on, and in connection with this specific project, and shall not be used, in whole or in part, for any purpose for which they were not originally intended without written permission from BICKEL GROUP. © 2021

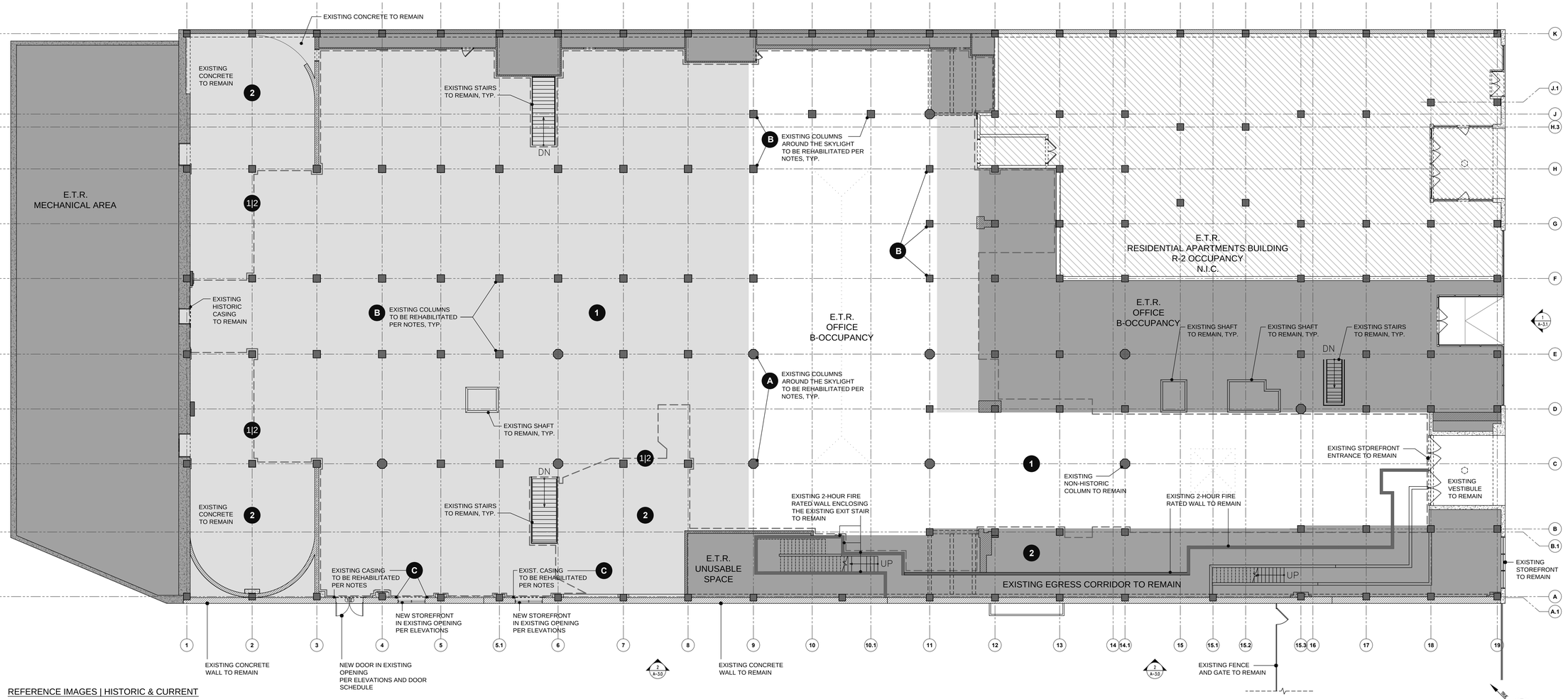
SHEET TITLE:

EXISTING FLOOR PLAN

SUB DATE	06/17/2022
BID DATE	
DATE:	06/13/2022
DRAWN BY:	TA
JOB NO:	21051
CHECKED BY:	EM

SHEET NUMBER:

A-1.0



PROPOSED FLOOR PLAN | GROUND FLOOR

SCALE = 3/32" = 1'-0"

LEGEND

- EXISTING CONCRETE WALL TO REMAIN
- EXISTING CONSTRUCTION TO REMAIN
- EXISTING MASONRY WALL TO REMAIN

SPACE SIGNIFICANCE

- PART A
- PART B
- OUT OF SCOPE
- NOT IN CONTRACT, NEIGHBORING PROPERTY

EXISTING FLOORING

- EXPOSED EXISTING PINK TENNESSEE MARBLE, TO BE REHABILITATED PER NOTES

GENERAL NOTES

PART A, CHARACTER-DEFINING ELEMENTS

1 French Pink Tennessee Marble | Flooring
- **Condition:** Remains for the most part dirty, studded with partition fasteners, and damaged by suspended renovation.
- **Repairs:** Clean, patch with resin, match the tone, fill dents to avoid trip hazards; repair all surfaces as per rehabilitation recommendations in A-0.2

A Terra Cotta Cladding | Columns (GL 9-11)

B
- **Condition:** Intact above and stripped below the suspended ceiling system. The bottom portions of the columns are refinished in gypsum board or plaster in a smaller, square profile.
- **Repairs:** Remove all non-historic elements. Clean, patch, and repair existing terra cotta cladding. See recommendations in A-0.2. Rebuilt the removed portions of the cladding with GFRC following the original octagonal shape; GFRC to be aligned with existing terra cotta cladding; attachment to be designed as design-build.

A Terra Cotta Capitals | Columns

B
- **Condition:** Overall, preserved; There's peeling paint, and chipped plaster in places.
- **Repairs:** Clean, patch, and repair as per rehabilitation recommendations in A-0.2

PART B, CHARACTER-DEFINING ELEMENTS

1 French Pink Tennessee Marble | Flooring
- **Condition:** Remains for the most part dirty, studded with partition fasteners, and damaged by suspended renovation.
- **Repairs:** Clean, patch with resin, match the tone, fill dents to avoid trip hazards; per rehabilitation recommendations in A-0.2

B Terra Cotta Cladding | Columns
- **Condition:** Intact above and stripped below the suspended ceiling system. The bottom portions of the columns are refinished in gypsum board or plaster in a smaller, square profile.
- **Repairs** (applicable to capitals)**:** Existing to remain.

C Plaster Casing | Door and storefronts openings
- **Condition:** Remains for the most part dirty. There's peeling paint, and chipped plaster in places.
- **Repairs:** Clean, patch, and repair existing casing per recommendations in A-0.2. For the new storefront opening, built new casing from mold to match adjacent existing casing profiles.

In case of necessary interventions beyond those proposed, consult with the lead architect.

REFERENCE IMAGES | HISTORIC & CURRENT

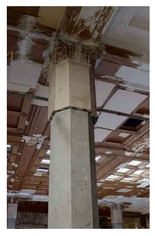
1 Original Pink Tennessee Marble Floor

1 Exposed Existing Pink Tennessee Marble

1|2 Marble - Concrete Borderline

2 Exposed Existing Concrete, Non-contributing Element

B Terra Cotta Clad Columns



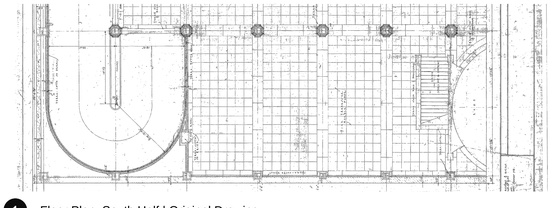
Existing Columns

A Skylight Hall, Significant Space

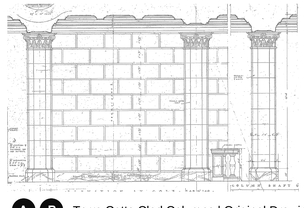
B Historic Concourse, Contributing Space

C Existing Plaster Casing

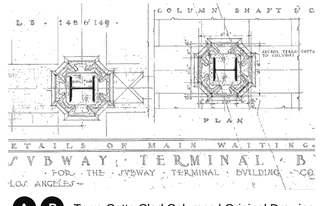
C Existing Plaster Casing



1 Floor Plan, South Half | Original Drawing



A B Terra Cotta Clad Columns | Original Drawing



A B Terra Cotta Clad Columns | Original Drawing

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
DISABLED ACCESS SECTION

This set of plans and specifications has been reviewed and is approved for compliance with state and local laws and ordinances related to accessibility to public accommodations and housing.

The stamping of this set of plans and specifications shall not be held to permit or to be an approval of the violation of any provisions of federal, state, and local laws and ordinances related to accessibility to public accommodations and housing.

By: EGARIN Total of 7 Sheets

Date: 03/31/2023

22016-10000-19644

417 S HILL STREET
HISTORIC REHABILITATION

417 SOUTH HILL STREET
LOS ANGELES, CALIFORNIA

REVISIONS

DATE/DELTA	REMARKS

BICKEL GROUP ARCHITECTURE
BICKEL GROUP INCORPORATED
3600 BIRCH STREET, SUITE 120
NEWPORT BEACH, CA 92660
P: 949.757.0411 F: 949.757.0511
w w w . b i c k e l g r p . c o m

REGISTERED ARCHITECT
TIMOTHY ANDREW
C-28855
06-30
RENEWAL DATE
STATE OF CALIFORNIA

The plans, ideas, arrangements and designs indicated or represented by this drawing are owned by, and are the property of BICKEL GROUP, and were created, evolved and developed for use on, and in connection with the specific project, and shall not be used, in whole or in part, for any purpose for which they were not originally intended without written permission from BICKEL GROUP © 2021

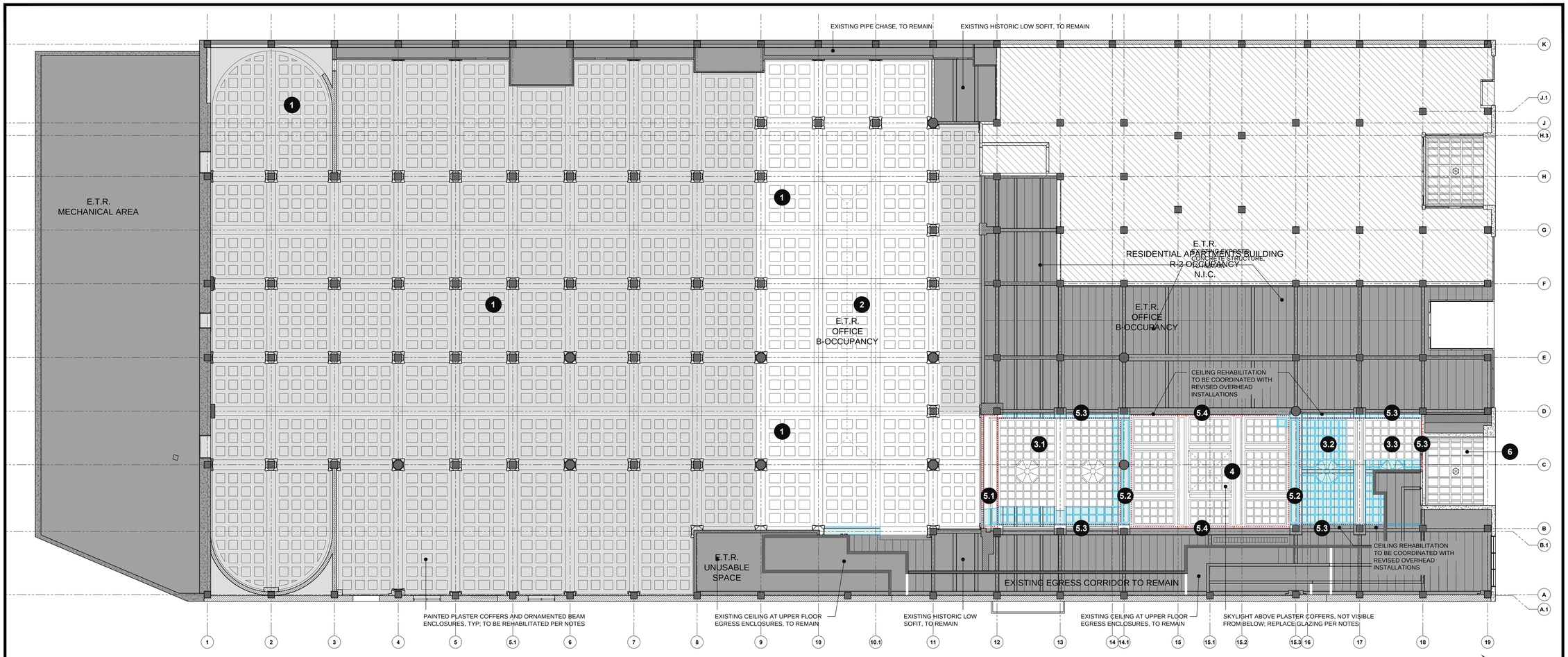
SHEET TITLE:

PROPOSED FLOOR PLAN

SUB DATE	06/17/2022
BID DATE	
DATE:	06/13/2022
DRAWN BY:	TA
JOB NO:	21051
CHECKED BY:	EM

SHEET NUMBER:

A-2.0



REFLECTED CEILING PLAN | GROUND FLOOR

SCALE = 3/32" = 1'-0"

LEGEND

EXISTING CONSTRUCTION TO REMAIN

CEILING FEATURES TO BE REBUILT FROM MOLD

CROWN MOLDING

SPACE SIGNIFICANCE

PART A

PART B

OUT OF SCOPE

NOT IN CONTRACT, NEIGHBORING PROPERTY

GENERAL NOTES

PART A, CHARACTER-DEFINING ELEMENTS

Ceiling Type 1 | Plaster coffers (GL 9-11)

- **Condition:** A beam and coffer system of painted plaster, with rosettes between coffers - extensively damaged from the anchoring of the suspended ceiling system and other work.
- **Repairs:** All non-historic elements to be removed. Clean, patch, and rehabilitate as per recommendations in A-0.2. To be painted cream white. Leave one or two clean existing modules for reference.

Ceiling Type 2 | Original coffered skylight

- **Condition:** The original wood frames with compo ornaments and multi-globe pendant lighting are missing. The original plaster coffers are extensively damaged from the anchoring of the suspended ceiling system and other work.
- **Repairs:** All non-historic elements to be removed. Clean, patch, and rehabilitate as per recommendations in A-0.2. Install ¼" clear, tempered glazing with frosted coating on bottom side. To be painted cream white.

Ceiling Type 3 | Plaster coffers

- **Condition:** The existing original metal grid holding the ceiling is compromised . Original plaster elements and pendant lighting are missing. The existing original plaster coffers are extensively damaged from the anchoring of the suspended ceiling system and other work.
- **Repairs:** Existing original metal structure - to be repaired; combine, where necessary, with the new suspension system. Missing original metal structure - apply new grid, see A-5.0 for details. Existing plaster features - all non-historic elements to be removed; repair, and rehabilitate according to notes in A-0.2. Missing elements - to be rebuilt from mold to match ceiling Type 3; for attachment, see A-5.0. To be painted cream white. Leave one or two clean existing modules for reference.

Ceiling Type 4 | Original Arcade skylight

- **Condition:** The original plaster framing along with the original wood frames with compo ornaments are damaged from the anchoring of the suspended ceiling system and other work. The original obscure glass is missing.
- **Repairs:** All non-historic elements to be removed; repair, and rehabilitate. Missing elements - to be rebuilt from mold to match ceiling Type 4. Install ¼" clear, tempered glazing with frosted coating on bottom side in the original wood frames. See A-0.2 for rehabilitation guidelines.To be painted cream white. Leave one or two clean existing modules for reference.

Ceiling Type 5 | Original crown molding, Arcade

- **Condition:** Missing or severely and extensively damaged from the anchoring of the suspended ceiling system and other work.
- **Repairs:** To be restored, rehabilitated, and rebuilt from mold to match crown molding types; per recommendations in A-0.2. To be painted cream white.

Ceiling Type 6 | Arched plaster coffers

To be cleaned as per elevations and notes A-0.2E.

PART B, CHARACTER-DEFINING ELEMENTS

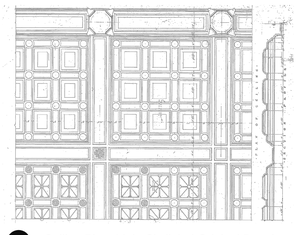
Ceiling Type 1 | Plaster coffers

- **Condition:** A beam and coffer system of painted plaster, with rosettes between coffers - extensively damaged from the anchoring of the suspended ceiling system and other work.
- **Repairs:** Clean, patch, and paint as per rehabilitation recommendations in A-0.2. To be painted cream white.

In case of necessary interventions beyond those proposed, consult with the lead architect.

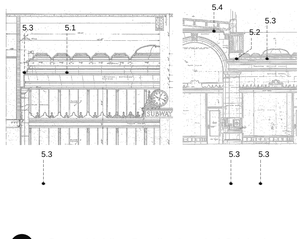
REFERENCE IMAGES | HISTORIC & CURRENT

1 Subway Terminal | Main Hall Looking East

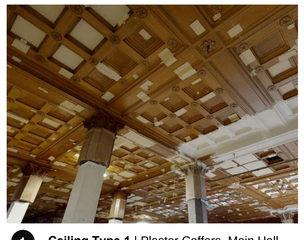


2 Ceiling Plan, Main Skylight | Original Drawing

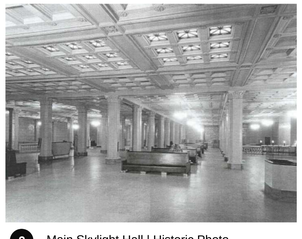
3 4 5 Ceiling Plan, Arcade | Original Drawings



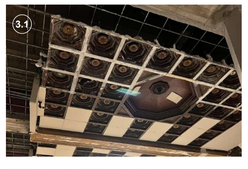
5 Crown Molding Details, Arcade | Original Drawings



1 **Ceiling Type 1** | Plaster Coffers, Main Hall



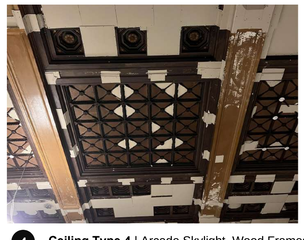
2 Main Skylight Hall | Historic Photo



3.1

3.2

3.3



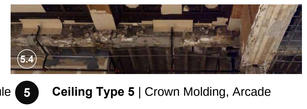
4 **Ceiling Type 4** | Arcade Skylight, Wood Frames w/ Compo Ornaments & Plaster Coffers

5.1

5.2

5.2

5.3



5.4

5 **Ceiling Type 5** | Crown Molding, Arcade

1 **Ceiling Type 1** | Plaster Coffers, North Ramp

2 **Ceiling Type 2** | Coffered Skylight

3 **Ceiling Type 3** | Plaster Coffers With Center Piece, Arcade

6 **Ceiling Type 6** | Arched Plaster Coffers, Vestibule

REVISIONS

DATE/DELTA	REMARKS

417 S HILL STREET
HISTORIC REHABILITATION

417 SOUTH HILL STREET
LOS ANGELES, CALIFORNIA

BICKEL GROUP
ARCHITECTURE
BICKEL GROUP INCORPORATED
3600 BIRCH STREET, SUITE 120
NEWPORT BEACH, CA 92660
P: 949.757.0411 F: 949.757.0511
w w w . b i c k e l g r p . c o m

The plans, ideas, arrangements and designs indicated or represented by this drawing are owned by, and are the property of BICKEL GROUP, and were created, evolved and developed solely for use on, and in connection with the specified project, and shall not be used, in whole or in part, for any purpose for which they were not originally intended without written permission from BICKEL GROUP © 2021

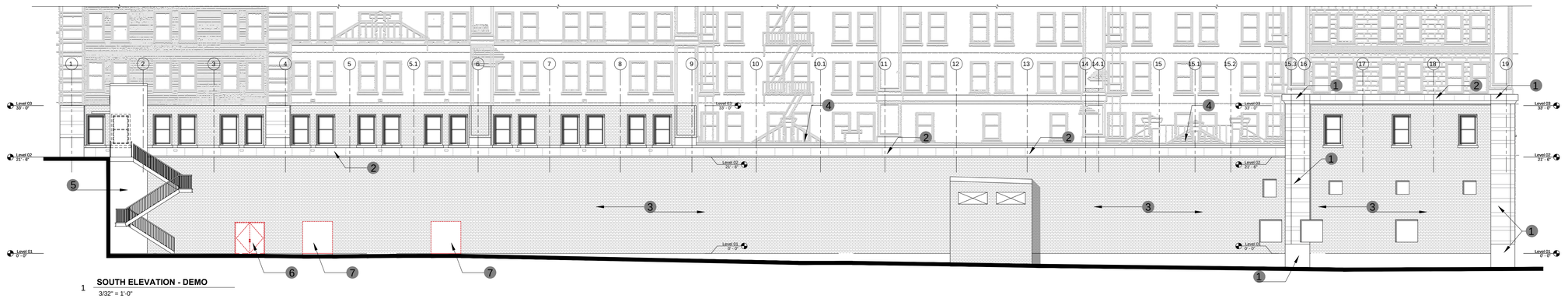
SHEET TITLE:

REFLECTED CEILING PLAN

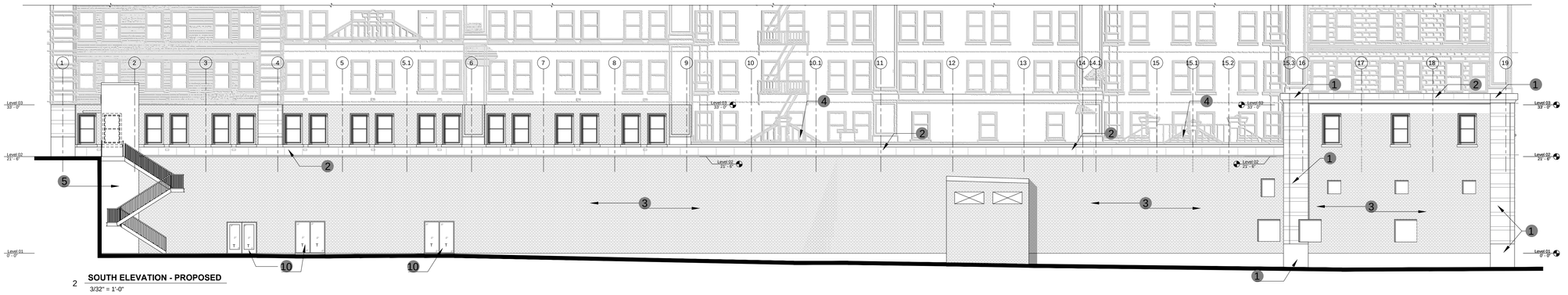
SUB DATE	06/17/2022
BID DATE	
DATE:	06/13/2022
DRAWN BY:	TA
JOB NO:	21051
CHECKED BY:	EM

SHEET NUMBER:

A-2.1

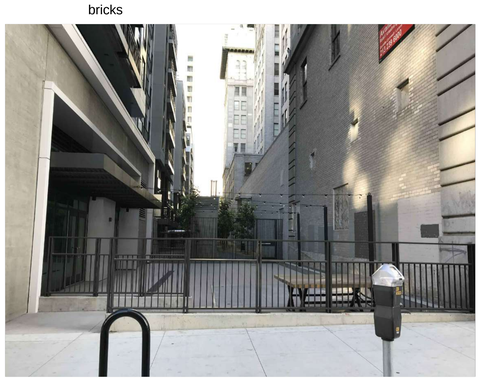


1 **SOUTH ELEVATION - DEMO**
3/32" = 1'-0"



2 **SOUTH ELEVATION - PROPOSED**
3/32" = 1'-0"

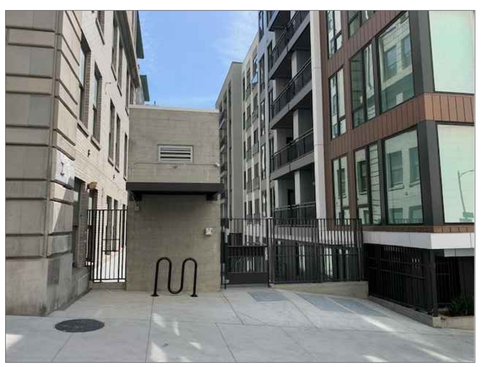
1 2 3 Fifth Street historical look - granite tiles, terra cotta and common bricks



1 3 Fifth Street current look - granite tiles and common bricks

3 5 Fifth Street current look - metal stair

3 Fifth Street current look - common bricks



1 3 5 Fifth Street current look - elevator

GENERAL NOTES:

1. Rusticated granite tiles. Original, significant character-defined features from primary importance to be cleaned.
2. Terra Cotta. Original, significant character-defined features from primary importance to be cleaned as per note A-0.2D
3. Common Bricks. Original, non-contributing to be cleaned.
4. Skylight. Original, significant character-defined features from primary importance to be cleaned, sealed and broken glasses to be changed.
5. Elevator and metal stair. Non-original, to remain.
6. Remove existing door. Existing opening to remain for new door.
7. Prepare existing openings for new storefront per proposed floor plan and elevation.
8. Not used.
9. Not used.
10. New dark bronze anodized aluminum storefront window frame arcadia (or equal). PPG solarban 60(2) clr/clr (or equal) 1" insulating low e glass panels "t" denotes tempered - safety glazing per CBC 2406 per details 6,7,11,12,13,14, 15/A-5.0.

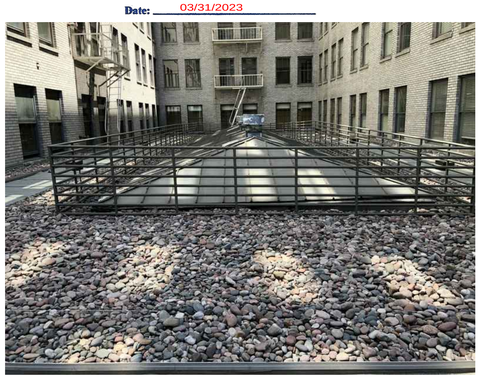
CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
DISABLED ACCESS SECTION

This set of plans and specifications has been reviewed and is approved for compliance with state and local laws and ordinances related to accessibility to public accommodations and housing.

The stamping of this set of plans and specifications shall not be held to permit or to be an approval of the violation of any provisions of federal, state, and local laws and ordinances related to accessibility to public accommodations and housing.

By: EDDIE GARIN Total of 7 Sheets

Date: 03/31/2023



4 Skylight current look

REVISIONS

DATE/DELTA	REMARKS

417 S HILL STREET
HISTORIC REHABILITATION

417 SOUTH HILL STREET
LOS ANGELES, CALIFORNIA

BICKEL GROUP ARCHITECTURE
BICKEL GROUP INCORPORATED
3600 BIRCH STREET, SUITE 120
NEWPORT BEACH, CA 92660
P: 949.757.0411 F: 949.757.0511
w w w . b i c k e l g r p . c o m

LICENSED PROFESSIONAL
C-20662
06-30
RENEWAL DATE
STATE OF CALIFORNIA

The plans, ideas, arrangements and designs indicated or represented by this drawing are owned by, and are the property of BICKEL GROUP, and were created and developed solely for use on, and in connection with this specific project, and shall not be used, in whole or in part, for any purpose for which they were not originally intended without written permission from BICKEL GROUP. © 2021

SHEET TITLE:

DEMO AND PROPOSED ELEVATION

SUB DATE	06/17/2022
BID DATE	
DATE:	06/13/2022
DRAWN BY:	TA
JOB NO:	21051
CHECKED BY:	EM

SHEET NUMBER:

A-3.0

1 **EAST ELEVATION - TO BE RESTORED**
3/32" = 1'-0"

GENERAL NOTES:

1. Rusticated granite tiles. Original, significant character-defined features from primary importance to be cleaned.
2. Barrel vaulted vestibule with coffered ceiling. Ceiling originally in polychrome painted plaster. Original shape and structure, non-original paint. Significant character-defined features from primary importance to be cleaned as per notes A-0.2E.
3. Lunettes composed of glass mosaic. Original, significant character-defined features from primary importance to be cleaned.
4. Granite corbels. Original, significant character-defined features from primary importance to be cleaned.
5. Pendant light fixture. Non-original, non-contributing features. To be retained and cleaned.
6. Aluminum glass store front. Non-original material, raster and location. Non-contributing feature. To be retained and cleaned.
7. Plaster wall at side of arched vestibule entrance - originally shops show windows. Non-original, non-contributing feature. To be cleaned.

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
DISABLED ACCESS SECTION

This set of plans and specifications has been reviewed and is approved for compliance with state and local laws and ordinances related to accessibility to public accommodations and housing.

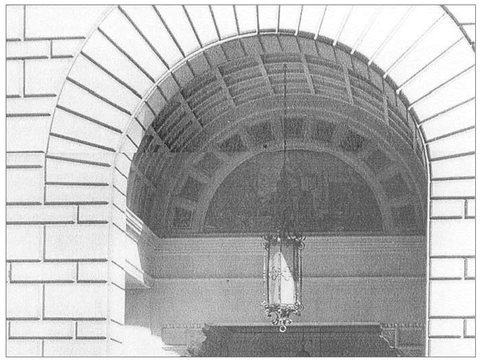
The stamping of this set of plans and specifications shall not be held to permit or to be an approval of the violation of any provisions of federal, state, and local laws and ordinances related to accessibility to public accommodations and housing.

By: EDDIE GARIN Total of 7 Sheets

Date: 03/31/2023

1 2 7 Hill Street historical look - granite tiles and arched entrance

1 2 6 7 Hill Street historical look - granite tiles, arched entrance and iron glass storefront

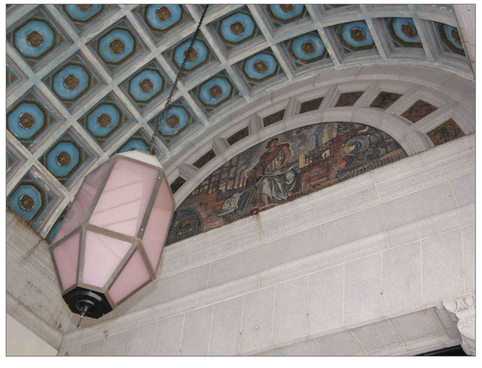


1 2 3 5 Hill Street historic look - original pendant light fixture, coffered celing and glass mosaic

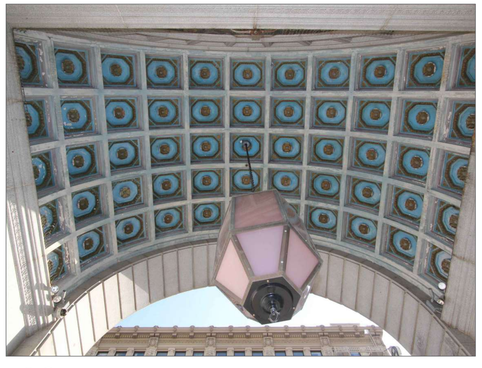
1 2 6 7 Hill Street current look - granite tiles, arched entrance, coffered ceiling, pendant, aluminum glass storefront and plaster wall

1 2 6 7 Hill Street current look - granite tiles, arched entrance, coffered ceiling, pendant and aluminum glass storefront

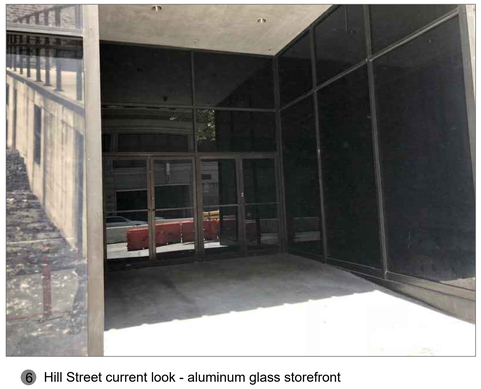
1 6 Hill Street current look - granite tiles and aluminum glass storefront



2 3 5 Hill Street current look - coffered ceiling, glass mosaic and pendant light fixture

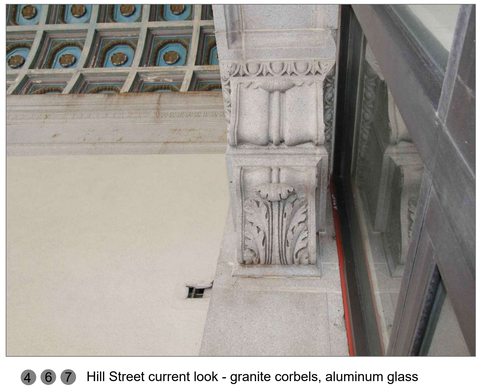


2 5 Hill Street current look - coffered ceiling and pendant light fixture



6 Hill Street current look - aluminum glass storefront

4 6 7 Hill Street current look - granite corbels, aluminum glass storefront and plaster wall at side of entrance



4 6 7 Hill Street current look - granite corbels, aluminum glass storefront and plaster wall at side of entrance

3 5 Hill Street current look - glass mosaic and pendant light fixture

REVISIONS

DATE/DELTA	REMARKS

417 S HILL STREET
HISTORIC REHABILITATION
417 SOUTH HILL STREET
LOS ANGELES, CALIFORNIA

BICKEL GROUP
ARCHITECTURE
BICKEL GROUP INCORPORATED
3600 BIRCH STREET, SUITE 120
NEWPORT BEACH, CA 92660
P: 949.757.0411 F: 949.757.0511
www.bickelgrp.com

LICENSED ARCHITECT
JAMES M. BICKEL
C-20825
06-30
2023
STATE OF CALIFORNIA

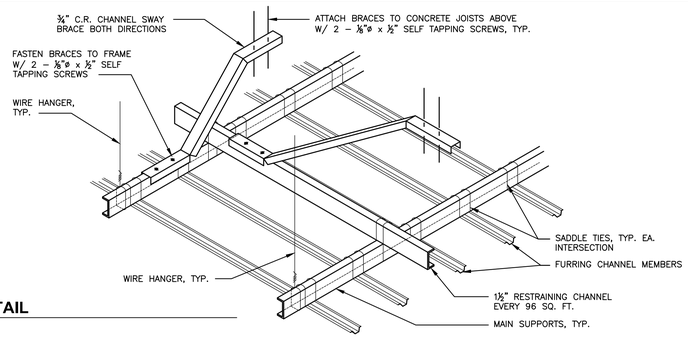
The plans, ideas, arrangements and designs indicated or represented by this drawing are owned by, and are the property of BICKEL GROUP, and were created and developed solely for use on, and in connection with this specific project, and shall not be used, in whole or in part, for any purpose whatsoever which they were not originally intended without written permission from BICKEL GROUP. © 2021

SHEET TITLE:

ELEVATION TO BE RESTORED

SUB DATE	06/07/2022
BID DATE	
DATE:	06/14/2022
DRAWN BY:	TA
JOB NO:	21051
CHECKED BY:	EM

SHEET NUMBER: A–3.1


3/4" C.R. CHANNEL SWAY BRACE BOTH DIRECTIONS
ATTACH BRACES TO CONCRETE JOISTS ABOVE W/ 2 – 1/8"ø x 1/2" SELF TAPPING SCREWS, TYP.
FASTEN BRACES TO FRAME W/ 2 – 1/8"ø x 1/2" SELF TAPPING SCREWS
WIRE HANGER, TYP.
SADDLE TIES, TYP. EA. INTERSECTION
FURRING CHANNEL MEMBERS
WIRE HANGER, TYP.
1 1/2" RESTRAINING CHANNEL EVERY 96 SQ. FT.
MAIN SUPPORTS, TYP.

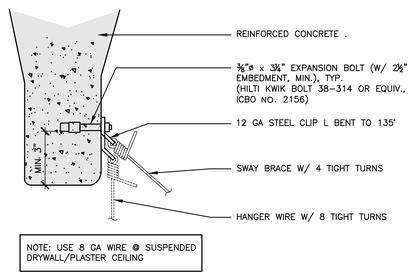
19 SWAY BRACE DETAIL

SCALE: NOT TO SCALE

HARDWAREGROUP 1				
QTY.	PRODUCT	MANUF. MODEL #	FINISH	MANUFACTURER
2	CONTINUOUS HINGE	CFM HD1	313	PEMKO
1	EXIT DEVICE	2601 CD	313	PR
1	EXIT DEVICE	2603 CD	313	PR
2	MORTISE CYLINDER	1E–74 PATD CORMAX	US10B	BE
1	RIM CYLINDER	12E–72 PATD CORMAX		BE
2	OFFSET DOOR PULL	RM3244–16		ROCKWOOD
2	DOOR CLOSER	QDC115R	313	SH
2	SPACER BLOCK	P45HD–110	313	SD
2	DROP PLATE	BQ00472 W/SCREW PACK	313	SH
2	OVERHEAD STOP	1020 SL SERIES	313	AB
1	GASKET	PROVIDED BY ALUM. DOOR MFG.		
2	DOOR SWEEP	C607 A		NA
1	DRIP CAP	16 A 4" ODW		NA
1	HANDICAP THRESHOLD	513 1/4–20 MS/LA RCE BOTH ENDS	313	NA

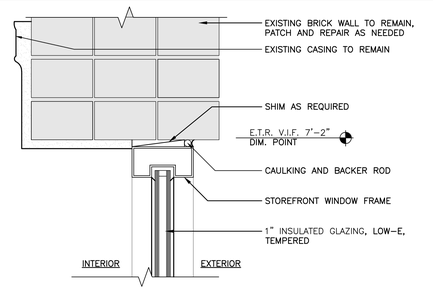
5 DOOR HARDWARE

SCALE: NOT TO SCALE


REINFORCED CONCRETE .
3/8"ø x 3 1/4" EXPANSION BOLT (W/ 2 1/2" EMBEDMENT, MIN.), TYP. (HILTI KWIK BOLT 3B–314 OR EQUIV., ICBO NO. 2156)
12 GA STEEL CLIP L BENT TO 135°
MIN. 3"
SWAY BRACE W/ 4 TIGHT TURNS
HANGER WIRE W/ 8 TIGHT TURNS
NOTE: USE 8 GA WIRE @ SUSPENDED DRYWALL/PLASTER CEILING

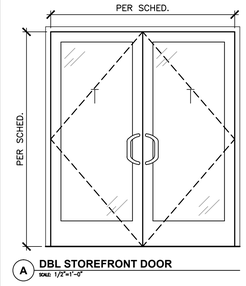
18 SPLAY OR HANGER WIRE ATTACHMENT

SCALE: NOT TO SCALE


EXISTING BRICK WALL TO REMAIN, PATCH AND REPAIR AS NEEDED
EXISTING CASING TO REMAIN
SHIM AS REQUIRED
E.T.R. V.I.F. 7'–2" DIM. POINT
CAULKING AND BACKER ROD
STOREFRONT WINDOW FRAME
1" INSULATED GLAZING, LOW–E, TEMPERED
INTERIOR
EXTERIOR

14 STOREFRONT HEAD @ EXISTING OPENING

SCALE: 3"=1'–0"



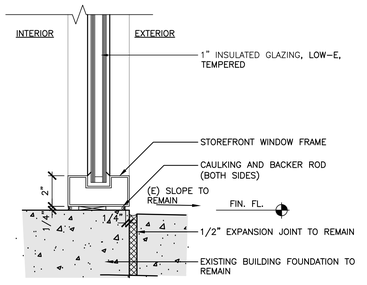
A DBL STOREFRONT DOOR

SCALE: 1/2"=1'–0"

4 DOOR STYLES

SCALE: 1/2"=1'–0"

NOTE: BOTTOM OF ALL DOORS TO HAVE A 10" SMOOTH UNINTERRUPTED SURFACE.

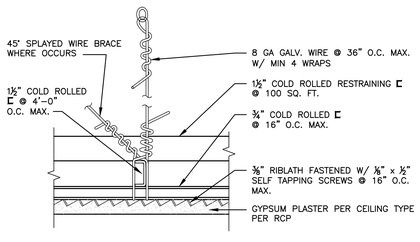


13 STOREFRONT SILL

SCALE: 3"=1'–0"

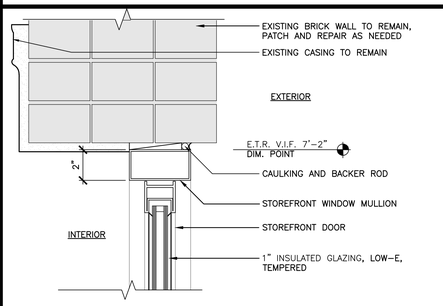
17 NOT USED

SCALE: NOT TO SCALE


45° SPLAYED WIRE BRACE WHERE OCCURS
8 GA GALV. WIRE @ 36" O.C. MAX. W/ MIN 4 WRAPS
1 1/2" COLD ROLLED RESTRAINING ⊏ @ 100 SQ. FT.
1 1/2" COLD ROLLED ⊏ @ 4'–0" O.C. MAX.
3/4" COLD ROLLED ⊏ @ 16" O.C. MAX.
3/8" RIBLATH FASTENED W/ 1/8" x 1/2" SELF TAPPING SCREWS @ 16" O.C. MAX.
GYPSUM PLASTER PER CEILING TYPE PER RCP

16 PLASTER CEILING DETAIL

SCALE: NOT TO SCALE



12 STOREFRONT DOOR HEAD

SCALE: 3"=1'–0"

ALL DOORS SHALL COMPLY WITH SECTION 1016 C.B.C.

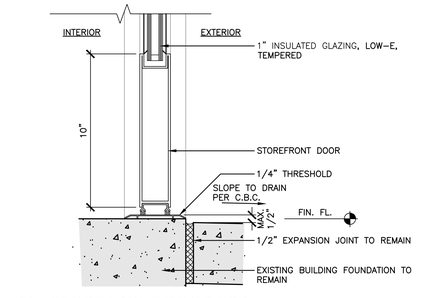
1. A FLOOR OR LANDING NOT MORE THAN 1/4" BELOW THE THRESHOLD IS REQUIRED ON EACH SIDE OF AN EXIT DOOR.
2. PROVIDE SIGN W/ 1" HIGH LETTERS ON CONTRASTING BACKGROUND AT DOOR TRANSOM TO READ: "THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED"
3. EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIFIC KNOWLEDGE.
4. ALARM LOCK AND PANIC HARDWARE PER ELECTRICAL DRAWINGS.
5. PROVIDE PILE WEATHERSTRIPPING AT HEAD, JAMB AND SILL.
6. FRAMES SHALL BE EITHER ALUMINUM OR HOLLOW METAL AS INDICATED.
7. ALL DOORS SHALL BE 1 3/4" IN THICKNESS.
8. EXTERIOR DOORS SHALL HAVE WEATHERSTRIPPING AT THE HEAD AND JAMB, AND A THRESHOLD AT THE SILL.
9. ALLOW 2" FROM EDGE OF DOOR FRAME TO FINISH OF ADJACENT WALL FOR HARDWARE CLEARANCES.
10. DOORS SHALL SWING TO A FULL OPEN POSITION, WHEN OPENING FORCE NOT TO EXCEED 5 POUNDS FOR EXTERIOR AND INTERIOR DOORS AND 15 POUNDS FOR FIRE DOORS IS APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. (SEE CBC SECTION 11B–404.2.9)
11. ALL DOOR HARDWARE SHALL BE LEVER TYPE, PUSH TYPE OR PANIC TYPE.

TITLE–24/ADA REQUIREMENTS

PER CBC CH. 11B–404: HANDLES, PULLS, LATCHES AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE. LEVER–OPERATED MECHANISMS, PUSH–TYPE MECHANISMS, AND U–SHAPED HANDLES ARE ACCEPTABLE DESIGNS. WHEN SLIDING DOORS ARE FULLY OPEN, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES. HARDWARE REQUIRED FOR ACCESSIBLE DOOR PASSAGE SHALL BE MOUNTED NO LOWER THAN 34" (864MM) AND NO HIGHER THAN 44" (1118mm) ABOVE THE FINISHED FLOOR.

2 DOOR NOTES

SCALE: NOT TO SCALE



11 STOREFRONT DOOR SILL

SCALE: 3"=1'–0"

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
DISABLED ACCESS SECTION

This set of plans and specifications has been reviewed and is approved for compliance with state and local laws and ordinances related to accessibility to public accommodations and housing.

The stamping of this set of plans and specifications shall not be held to permit or to be an approval of the violation of any provisions of federal, state, and local laws and ordinances related to accessibility to public accommodations and housing.

By: EDDIE GARIN **Total of** 7 OF 7 **Sheets**

Date: 03/31/2023

DOOR SCHEDULE						
NO.	TYPE	SIZE	MAT'L	DETAIL	HDWR	REMARKS
102	A	(2) 3'–0" x 7'–0"	ALUM	11 & 12	1	STOREFRONT DOUBLE DOOR W/ PH

NOTE:
- SEE DETAIL 2 FOR DOOR NOTES FOR ADDITIONAL INFORMATION AND REQUIREMENTS
- SEE DETAIL 5 FOR DOOR HARDWARE
- SEE DETAIL 4 FOR DOOR STYLES
- "T" STAYS FOR TEMPERED GRAZING
- "PH" STAYS FOR PANIC HARDWARE/EXIT DEVICE TO BE PROVIDED

1 DOOR SCHEDULE

SCALE: NOT TO SCALE

REVISIONS

DATE/DELTA	REMARKS

417 S HILL STREET HISTORIC REHABILITATION

417 SOUTH HILL STREET
LOS ANGELES, CALIFORNIA

BICKEL GROUP ARCHITECTURE
BICKEL GROUP INCORPORATED
3600 BIRCH STREET, SUITE 120
NEWPORT BEACH, CA 92660
P: 949.757.0411 F: 949.757.0511
www.bickelgrp.com

LICENSED ARCHITECT — REGISTERED PROFESSIONAL — C-28053 — 06-23 — RENEW DATE — STATE OF CALIFORNIA

The plans, ideas, arrangements and designs indicated or represented by this drawing are owned by, and are the property of BICKEL GROUP, and were created and developed solely for use on, and in connection with, this specific project, and shall not be used, in whole or in part, for any purpose or project other than those originally intended without written permission from BICKEL GROUP. © 2021

SHEET TITLE:

DOOR SCEDULE & EXTERIOR AND INTERIOR DETAILS

SUB DATE	06/17/2022
BID DATE	
DATE:	06/13/2022
DRAWN BY:	TA
JOB NO:	21051
CHECKED BY:	EM

SHEET NUMBER:

A-5.0